1991–1992
STATISTICAL COMMITTEE
OF THE
EDISON ELECTRIC INSTITUTE

Chairman, W.M. McMANUS, Delmarva Power & Light Co., Wilmington, DE
Vice Chairman, D.H. TANIS, Public Service Enterprise Group, Inc., Newark, NJ
Staff Representative, T.R. DAUGHERTY, Edison Electric Institute, Washington, D.C.
Yearbook Editor, G.L. CINTRON, Edison Electric Institute, Washington, D.C.

P.J. ACOSTA, Louisiana Power & Light Co. and New Orleans Public Service Co., New Orleans, LA

C.R. BECK, Public Service Co. of Colorado, Denver, CO

E. BOVARNICK, Florida Power & Light Co., Juno Beach, FL

J. BRANOM, Arizona Public Service Co., Phoenix, AZ

C.J. CARRUBBA, Mississippi Power Co., Gulfport, MS

L.A. COOK, Georgia Power Co., Atlanta, GA

C.W. DAVIS, Southern California Edison Co., Rosemead, CA

G.C. DEAN, American Electric Power Service Corp., Columbus, OH

D.M. DEMPSEY, Alabama Power Co., Birmingham, AL

D. DeROSA, Consolidated Edison Co. of New York, Inc., New York, NY

T. DICHMANN, Central & South West Services, Dallas, TX

S.E. ENNIS, Virginia Electric and Power Co., Richmond, VA

R.E. FORD, Pennsylvania Power & Light Co., Allentown, PA

C.A. GILZON, Consumers Power Co., Jackson, MI

J. HALL, South Carolina Electric & Gas, Columbia, SC

R.D. HALL, Ohio Edison Co., Akron, OH

J.D. HARPER, Public Service Co. of Oklahoma, Tulsa, OK

D.F. JONES, Atlantic City Electric Co., Pleasantville, NJ

C.W. LEVAN, Union Electric Co., St. Louis, MO

M.A. MANNING, Arkansas Power & Light Co., Little Rock, AR

J.B. MITCHELL, Philadelphia Electric Co., Philadelphia, PA

C.S. MOULTON, PacifiCorp, Salt Lake City, UT

J.E. RINGSDORF, JR., Baltimore Gas and Electric, Co., Baltimore, MD

F.H. SANDIFER, Pacific Gas & Electric Co., San Francisco, CA

L.D. SCHELHORSE, San Diego Gas & Electric Co., San Diego, CA

B. SHAPARD, Texas Utilities Electric Co., Dallas, TX

L.M. THOMAS, III, Southern Company Services, Inc., Atlanta GA

A.H. WADE, Gulf States Utilities Co., Beaumont, TX

H.A. WILLERT, Northern States Power Co., Minneapolis, MN

EDISON ELECTRIC INSTITUTE is the association of electric companies. Its members serve 98 percent of all customers served by the investor-owned segment of the industry. They generate approximately 78 percent of all the electricity in the country and service 75 percent of all ultimate customers in the nation.

Organized in 1933 and incorporated in 1970, EEI provides a principal forum where electric utility people exchange information on developments in their business, and maintain liaison between the industry and the Federal government. Its officers act as spokesmen for investor-owned electric utility companies on subjects of national interest.

Since 1933, EEI has been a strong, continuous stimulant to the art of making electricity. A basic objective is the "advancement in the public service of the art of producing, transmitting, and distributing electricity and the promotion of scientific research in such field." EEI ascertains factual information, data and statistics relating to the electric industry, and makes them available to member companies, the public, and government representatives.

STATISTICAL YEARBOOK

OF THE ELECTRIC UTILITY INDUSTRY/1990

Published October 1991/Number 58

"Copyright © 1991 Edison Electric Institute. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or any information storage or retrieval system or method, now known or hereinafter invented or adopted, without express prior written permission of the publisher, Edison Electric Institute. Requests for such permission should be directed to the Director of Statistics, Edison Electric Institute, 701 Pennsylvania Avenue, NW, Washington, DC 20004-2696."

PUBLICATIONS PREPARED BY THE STATISTICS DEPARTMENT

Capacity and Generation of Non-Utility Sources of Energy
Presents statistics compiled from electric utility reports and other sources for 1989 and a limited amount of historical data on capacity and electric generation of non-utility producers of energy (cogenerators, small power producers and other non-utility producers). The report contains national data on capacity and generation by year, type of producer and qualifying status; number and size of projects; electric utility receipts from non-utility producers from 1979 through 1989; yearly additions of capacity from 1980 through 1989; type of connection and dispatchability; prime mover; primary energy source; and major industry group. Published annually in the winter. 80p.

Catalogue of Investor-Owned Electric Utility Companies Operating in the United States
Complete reference of investor-owned electric utility names, addresses and phone numbers, arranged on a state basis according to location of principal office. Holding companies and systems, and jointly-owned companies are cross-referenced with operating subsidiaries. Ranking of companies according to number of ultimate customers is presented. Published annually in the fall. 48p.

Digest of Electric Utility Financial Ratios
Provides a method of calculation for the predominant ratios used by the industry in analyzing financial reports. Categories of ratios include Earnings and Return; Common Dividend; Coverages, Interest and Preferred Dividend; Balance Sheet; Revenue and Sales; Expense; Tax; Plant; Depreciation; other ratios, such as funds used during construction as percent of earnings and per share, capital expenditures, etc. Prepared by EEI Financial Ratios Subcommittee of the Statistical Committee. 31p.

EEI Pocketbook of Electric Utility Industry Statistics
A pocket-sized quick reference of national electric utility industry data, some dating from the early 1900's. Categories include data on installed capacity, generation, capital and finance, sales, revenue, customers, fuels and private and public ownership. Published annually in late fall. 36p.

Electric Power Equipment Report (new title)
This report presents data concerning the electric power supply, expansion of electric generating facilities, and the manufacture of heavy electric power equipment in the U.S. as of the end of the year. Power supply data including peak loads, capability to meet loads, kilowatthour requirements, load factors, and comparison between summer and winter seasons are shown on a total industry basis for each of the nine reliability councils and for total contiguous U.S. Also included are orders and shipment information on the manufacture of heavy electric power equipment in the U.S. and foreign-made equipment to be imported by U.S. industrials and U.S. electric utility systems. Published annually in the fall. 40p.

Disk Versions of EEI Statistical Yearbook
Contains 88 LOTUS 1-2-3 files that print out as close approximations of the tables in the Statistical Yearbook. Filenames are in the form TABLEnn.WK1. Wherever possible, the same number of years have been included as in the printed version of the Statistical Yearbook. The LOTUS worksheet format facilitates easy extraction and manipulation of data series from the Yearbook tables without re-keying, as well as allowing the options of producing whole tables (or selected parts) in hard copy and LOTUS graphics. In the 5¼" version there are 24 table files on the first disk and 32 each on the second and third disks. In addition to a "README" file on the first disk, each floppy contains a FILEINFO.WK1 worksheet file with descriptions of each table's contents, the same data in FILEINFO.PRN form that can be "typed" to the PC screen, and a FILEINFO.COM program with paging, printing, and keyword-finding functions to manipulate the table titles. The 3½" version comes on one disk with three subdirectories. Available in the winter.

Glossary of Electric Utility Terms
Provides practical definitions for terms commonly used in the electric utility industry. Since the last revision in 1984, the Glossary has been expanded to include information and terms on Demand-Side Management, Non-Utility Generation, Nuclear Generation and additional terms on financial and general operations. Prepared by the EEI Glossary of Electric Terms Subcommittee of the Statistical Committee. 61p.

Guidelines for Defining & Classifying Electric Customers by Major Energy Use
Provides guidelines within the electric utility industry for counting, classifying, and summarizing customers, categorizing sales and revenues by major energy use, and determining average use and average revenue per customer. The report contains definitions as well as the application of the definitions to specific situations and problem areas. Historically, the industry has based its classifications on rate schedules and it is probable that the recommendations in this report are unsuitable for rate analysis. However, the recommendations are offered as a basis for making a more significant market-oriented representation of sales statistics available to the industry, security analysts, and others with interest in electric utilities. 8p.

Post-Summer Electric Power Survey
Reports results of a scheduled generating additions survey as of July 1, and a summer peak load survey as of September 15. There are listings of actual additions to generating capacity during the first half of the year and of those scheduled for the future. Contains first

actual regional capability, peak load, and percent capacity margin values for the summer season just completed. NERC's latest ten-year fuel projections are presented in terms of both regional generation from each energy source, and in physical units of coal, oil and gas to be burned for electric generation. Also includes information on the manufacture of heavy electric power equipment in the U.S. and foreign-made equipment to be imported by U.S. industrials and U.S. electric utility systems, orders and shipments during the first half and shipment backlogs as of July 1. Published early the next year. 40p.

Problems and Limitations of Intercompany Comparisons of Investor-Owned Electric Utilities
Assists analysts and others who may wish to make industry-wide comparisons of investor-owned electric utilities. The report illustrates some of the main factors that can facilitate valid intercompany differences in performances. The Executive Summary briefly examines some of the more important factors that lead to performance differences between companies. The Discussion Section covers in greater detail many of the factors that can generate invalid and inaccurate comparisons. Prepared by EEI Problems and Limitations Subcommittee of the Statistical Committee. 51p.

Statistical Releases
Yearly subscription includes: 1) Electric Output, issued weekly for nine geographic divisions and total U.S.; data for latest 52-week period and calendar year to date; latest quarterly data for installed capacity, generation, customers and sales 2) Quarterly Statistical Report, presents latest sources of electricity, including net generation, net imports of electricity, and net amounts available for distribution; customers, sales, and revenues by class of electric service; average use and revenue data 3) Advance Release, issued in summer, includes selected tables that appear later in Statistical Yearbook 4) Statistical Yearbook of the Electric Utility Industry.

Statistical Yearbook of the Electric Utility Industry
Data compiled from company reports and other sources on operational and financial aspects of the total electric utility industry. Categories include national and state statistics on installed capacity; electric generation and supply; sales, revenue and customers by class of service; investor-owned data are presented for operating and related ratios; fuel use; financial; and general economics series. Prepared under the general guidance of the EEI Statistical Committee. Published annually in the fall. 101p.

Statistics, Non-Investor-Owned Electric Utilities
Financial and operating data on government-owned (municipal, state/public power district and federal) and government-financed (cooperative) electric power systems. Tables present data on installed capacity, generation, customers, sales and revenue, in addition to selected financial data. Published annually in the fall. 40p.

Statistics on Fuel Used to Generate Electricity by the Electric Utility Industry
Fuel data are presented for the United States by state and Census Division, detailed by type of fuel (coal, oil, natural gas and nuclear) for both the Total Electric Utility Industry and the Investor-Owned segment. Heat rate, average Btu content, and cost of fuel per kilowatthour, per million Btu, and per unit consumed are shown for the most recent and four preceding years. Published annually in the fall. 75p.

Order card located in back of book.

CONTENTS

	Chart	Table	Page
Publications Prepared by the Statistics Department			II
Scope and Coverage 1990 in Review			1
Diagram of United States Sources of Electric Generation By Type of Ownership			3
Summary Statistics — 1990 and 1989			4
SECTION I — GENERATING CAPACITY			
Installed Generating Capacity — Total United States By Ownership, 1970–1990	I-A		6
Installed Generating Capacity in the United States By Ownership, 1970–1990		1	7
Installed Generating Capacity — Total Electric Utility Industry By Ownership and Type of Prime Mover, 1970–1990		2	8
Installed Generating Capacity — Total Electric Utility Industry By State and Type of Prime Mover, 1989 and 1990		3	10
Installed Generating Capacity — Investor-Owned Electric Utilities By State and Type of Prime Mover, 1989 and 1990		4	11
SECTION II — ELECTRIC POWER SUPPLY			
Capacity, Capability and Peak Load Total Electric Utility Industry, 1970–1990	II-A		12
Capability — Peak Load — Kilowatthour Requirements Total Electric Utility Industry, 1970–1990		7	13
Electricity Made Available in the United States, 1970–1990		8	14
Total United States Kilowatthour Source and Disposition, 1970–1990		9	15
World Power Data — Fifteen Countries with Greatest Installed Generating Capacity, 1989		10	16
World Generating Capacity — Six Largest Countries, 1989	II-B		15
SECTION III — GENERATION			
Generation by Type of Prime Mover Total Electric Utility Industry, 1970–1990	III-A		17
Generation by Census Divisions Total Electric Utility Industry, 1990	III-B		18
Generation — Total Electric Utility Industry By Ownership and Type of Prime Mover, 1970–1990		12	19
Generation Per Kilowatt of Installed Nameplate Capacity Total Electric Utility Industry — By Ownership and Type of Prime Mover, 1970–1990		13	21
Generation in Percent of Total Total Electric Utility Industry — By Ownership and Type of Prime Mover, 1970–1990		14	22
Generation — Total Electric Utility Industry By State and Type of Prime Mover, 1989 and 1990		15	23
Generation — Investor-Owned Electric Utilities By State and Type of Prime Mover, 1989 and 1990		16	24
Generation — Total Electric Utility Industry and Investor-Owned Electric Utilities By Month and Type of Prime Mover, 1987–1990		17	25
Index of Weekly Electric Output — Total Electric Utility Industry, 1980–1990		18	26
Weekly Electric Output — Total Electric Utility Industry, 1988–1990		19	27
SECTION IV — FUEL			
Electric Power Generation Total Electric Utility Industry — By Source, 1970–1990	IV-A		28
Sources of Energy for Electric Generation Total Electric Utility Industry — By Year and Energy Source, 1970–1990		21	29
Sources of Energy for Electric Generation in Percent of Total Total Electric Utility Industry — By Year and Energy Source, 1970–1990		22	29

	Chart	Table	Page
Sources of Energy for Electric Generation — Total Electric Utility Industry — By State and Energy Source, 1990		23	30
Sources of Energy for Electric Generation — Total Electric Utility Industry — By State and Energy Source, 1990-Percent		24	31
Consumption of Fossil Fuels for Electric Generation — Total Electric Utility Industry — By Year and Kind of Fuel, 1970–1990		25	32
Consumption of Fossil Fuels for Electric Generation — Total Electric Utility Industry — By State and Kind of Fuel, 1990		26	33
Fossil Fuels Used for Electric Generation — Total Electric Utility Industry — By Geographic Division, 1987–1990		27	34
Nuclear Fuel Used for Electric Generation — By Geographic Division, 1987–1990		28	35
Fossil Fuels Used for Electric Generation — Total Electric Utility Industry — By State, 1990		29	36
Nuclear Fuel Used for Electric Generation — By State, 1990		30	37
Average Cost of Fossil Fuels Delivered to Steam — Electric Utility Plants, 1985–1990		31	38
SECTION V — ENERGY			
Energy Production and Consumption — By Primary Energy Source, 1980, 1985, 1990	V-A		39
Energy Supply and Disposition Balance — By Year, 1970–1990		32	40
Annual Consumption of Fossil Energy Resources — By Kind of Fuel, By Sector, 1985–1990		33	41
SECTION VI — ENERGY SALES			
Energy Sales to Ultimate Customers — Investor-Owned Electric Utilities, 1970–1990	VI-A		42
Energy Sales — Total Electric Utility Industry — By Year and Class of Service, 1970–1990		38	43
Energy Sales — Investor-Owned Electric Utilities — By Year and Class of Service, 1970–1990		39	43
Energy Sales in Percent of Total — Total Electric Utility Industry — By Year and Class of Service, 1970–1990		40	44
Energy Sales — Total Electric Utility Industry — By Year and Class of Service, 1980, 1985, 1990	VI-B		44
Energy Sales to Ultimate Customers — By Investor-Owned and Non-Investor-Owned Electric Utilities, 1990	VI-C		45
Energy Sales — Total Electric Utility Industry — By State and Class of Service, 1990		41A	46
Energy Sales — Total Electric Utility Industry — By State and Class of Service, 1989		41B	47
Energy Sales — Investor-Owned Electric Utilities — By State and Class of Service, 1990		42A	48
Energy Sales — Investor-Owned Electric Utilities — By State and Class of Service, 1989		42B	49
Energy Sales — Total Electric Utility Industry — By Quarter and Class of Service, 1985–1990		43	50
Energy Sales — Investor-Owned Electric Utilities — By Quarter and Class of Service, 1985–1990		44	51
Average Annual kWh Use per Customer — By Certain Class of Service, 1970–1990		45	52
Average kWh Used — Total Electric Utility Industry — By Certain Class of Service, 1975, 1980, 1985, 1990	VI-D		52
SECTION VII — CUSTOMERS			
Ultimate Customers — Total Electric Utility Industry — By Year and Class of Service at December 31st, 1970–1990		47	53
Ultimate Customers — Investor-Owned Electric Utilities — By Year and Class of Service at December 31st, 1970–1990		48	54
Customers in Percent of Total — Total Electric Utility Industry — By Year and Class of Service at December 31st, 1970–1990		49	54
Ultimate Customers — Total Electric Utility Industry — By State and Class of Service at December 31st, 1990		50A	55

	Chart	Table	Page
Ultimate Customers — Total Electric Utility Industry By State and Class of Service at December 31st, 1989		50B	56
Ultimate Customers — Investor-Owned Electric Utilities By State and Class of Service at December 31st, 1990		51A	57
Ultimate Customers — Investor-Owned Electric Utilities By State and Class of Service at December 31st, 1989		51B	58
Average Number of Customers — Total Electric Utility Industry By State and Certain Class of Service, 1990		52A	59
Average Number of Customers — Total Electric Utility Industry By State and Certain Class of Service, 1989		52B	60
Average Number of Customers — Investor-Owned Electric Utilities By State and Certain Class of Service, 1990		53A	61
Average Number of Customers — Investor-Owned Electric Utilities By State and Certain Class of Service, 1989		53B	62
SECTION VIII — REVENUES			
Revenues From Ultimate Customers By Ownership and Class of Service, 1970, 1975, 1980, 1985, 1990	VIII-A		63
Revenues — Total Electric Utility Industry By Year and Class of Service, 1970–1990		56	64
Revenues — Investor-Owned Electric Utilities By Year and Class of Service, 1970–1990		57	64
Revenues in Percent of Total — Total Electric Utility Industry By Year and Class of Service, 1970–1990		58	65
Revenues — Total Electric Utility Industry By Year and Class of Service, 1980, 1985, 1990	VIII-B		65
Revenues — Total Electric Utility Industry By State and Class of Service, 1990		59A	66
Revenues — Total Electric Utility Industry By State and Class of Service, 1989		59B	67
Revenues — Investor-Owned Electric Utilities By State and Class of Service, 1990		60A	68
Revenues — Investor-Owned Electric Utilities By State and Class of Service, 1989		60B	69
Revenues — Total Electric Utility Industry By Quarter and Class of Service, 1985–1990		61	70
Revenues — Investor-Owned Electric Utilities By Quarter and Class of Service, 1985–1990		62	71
Average Revenues Per kWh Sold — Total Electric Utility Industry By Year and Certain Class of Service, 1970–1990	VIII-C		72
Average Revenues Per kWh Sold — Total Electric Utility Industry By Class of Service, 1970–1990		63	73
Average Revenues Per kWh Sold — Investor-Owned Electric Utilities By Class of Service, 1970–1990		64	73
Average Annual Revenue Per Customer By Year and Certain Class of Service, 1970–1990		65	74
Revenue and Use Per Total Ultimate Customer — By State, 1990		66A	75
Revenue and Use Per Total Ultimate Customer — By State, 1989		66B	76
Revenue and Use Per Residential Customer — By State, 1990		67A	77
Revenue and Use Per Residential Customer — By State, 1989		67B	78
Revenue and Use Per Commercial Customer — By State, 1990		68A	79
Revenue and Use Per Commercial Customer — By State, 1989		68B	80
Revenue and Use Per Industrial Customer — By State, 1990		69A	81
Revenue and Use Per Industrial Customer — By State, 1989		69B	82
SECTION IX — FINANCIAL			
Construction Expenditures — Investor-Owned Electric Utilities By Type of Plant, 1970, 1975, 1980, 1985, 1990	IX-A		83
Construction Expenditures — Investor-Owned Electric Utilities By Type of Plant, 1970–1990		70	84
Combined Balance Sheets — December 31st Investor-Owned Electric Utilities, 1985–1990		71	85

	Chart	Table	Page
Combined Income Statements — December 31st Investor-Owned Electric Utilities, 1985–1990		72	86
Detail of Electric Operation and Maintenance Expenses Investor-Owned Electric Utilities, 1985–1990		73	87
Detail of Taxes -- Electric Department Only Investor-Owned Electric Utilities, 1985–1990		74	87
Capitalization and Capitalization Ratios Investor-Owned Electric Utilities, 1985–1990		75	88
Statement of Cash Flows Investor-Owned Electric Utilities, 1989 and 1990		76	89
Public Utility Long-Term Financing — Investor-Owned Electric Utilities By Year, Type of Issue, Purpose, and Type of Utility, 1985–1990		77	90
Weighted Average of Yields on Newly Issued Domestic Bonds and Preferred Stocks, 1970–1990		78	91
Moody's Average Yields on Utility Bonds and Stocks, 1980–1990		79	92
Moody's 24 Utility Common Stocks — End-Of-Month Averages, 1986–1991		80	93
SECTION X — ECONOMICS AND OTHER			
Consumer Price Index, 1967–1990		82	94
Producer Price Index — Finished Goods and Selected Industrial Commodities, 1970–1990		83	95
Cost Trends of Electric Light and Power Construction By Geographic Divisions, 1970–1991		84	96
Cost of Industrial Purchased Electric Power as a Percent of Value of Product Shipment — United States Average, 1982–1988		85	96
Circuit Miles of Overhead Electric Line of 22,000 Volts and Above in Service Total Electric Utility Industry — By State and Voltage Groups, 1988–1990		86	97
Circuit Miles of Overhead Electric Line of 22,000 Volts and Above in Service Investor-Owned Electric Utilities — By State and Voltage Groups, 1988–1990		87	98
Number of Electric Department Employees — Investor-Owned Electric Utilities, 1970–1990		88	99
Glossary			101
Map of Geographic Divisions as Reported by the Edison Electric Institute in its Weekly Release of Electric Output			102
Map of United States Census Geographic Divisions			103
Price List for Publications			104
Order Card			105

Scope and Coverage

This publication presents data on the electric utility industry, including generation, energy sales, customers and revenues, financial and economic. These data are collected and compiled from various sources as indicated on page 3. In all sections, except the Financial Section, data are presented for Investor-Owned Electric Utilities and the Total Electric Utility Industry. Dissimilarity between the investor-owned and the publicly-owned segments of the electric utility industry would make overall financial data incompatible even if it were available. Therefore, in the Financial Section, data are shown for Investor-Owned Electric Utilities only.

1990 in Review

The installed generating capacity of the electric utility industry at December 31, 1990 was 735,129 megawatts, an increase of 0.6 percent over December 31, 1989.

No. of units added during 1990

Hydro	Conventional Steam	Nuclear Steam	Combustion Turbine	Internal Combustion
2	4	2	19	1

Statistics on capacity and generation from pumped storage are included in hydroelectric and those for gas turbine are included in conventional steam.

Comparison of the 1990 and 1989 total electric utility industry generation data shows the following:

- Generation of electricity in the United States increased approximately 0.8 percent.
- Generation by oil decreased 26.0 percent and represented 4.2 percent of total generation.
- Generation by hydroelectric power increased 5.6 percent and natural gas production decreased 0.9 percent. Hydroelectric power and natural gas represented 10.0 percent and 9.4 percent, respectively, of total generation.
- Generation by nuclear power plants increased 9.0 percent and represented 20.6 percent of total generation. Generation from coal-fired units increased 0.3 percent and represented 55.5 percent of total generation.

Electric output, representing the total amount of electricity available for distribution, was 1.6 percent higher in 1990 than in 1989. Mild weather conditions throughout the year prevented any record weekly highs.

Energy sales to ultimate customers totalled 2,667 billion kilowatthours, an increase of approximately 1.8 percent over the previous year. Total utility revenues from ultimate customers were $175.5 billion in 1990, an increase of 3.5 percent over the previous year. Revenues increased 3.5 percent and 4.5 percent from residential and commercial customers, respectively, and industrial revenues increased 2.4 percent.

The total number of ultimate customers at December 31, 1990 was 109,766,385. Approximately 88.2 percent of this total were residential customers. In 1990 residential customers increased 1.2 percent from 1989. In the last 10 years residential customers have increased 17.8 percent.

Total electric operating revenues for the investor-owned electric utilities increased 3.8 percent in 1990 to $146.2 billion. Contributing to the increase in revenues were the electricity sales growth and favorable economic conditions. Electric operating expenses increased $5.5 billion. The cost of fuel represented 39.5 percent of total operation and maintenance expenses, down from 41.9 percent in 1989. Electric operating income decreased 0.7 percent to $29.3 billion. Earnings per share before Extraordinary Items and the Cumulative Effect of a change in acccounting principle also decreased 10.0 percent, to $1.88. Retained earnings reached $54.1 billion, a 3.2 percent increase over the $52.4 billion recorded in 1989.

In 1990 electric plant construction expenditures for the investor-owned electric utilities decreased to $24.3 billion (including nuclear fuel) from $24.8 billion in 1989. Of this 1990 total, $1.7 billion was the allowance for funds used during construction (AFUDC).

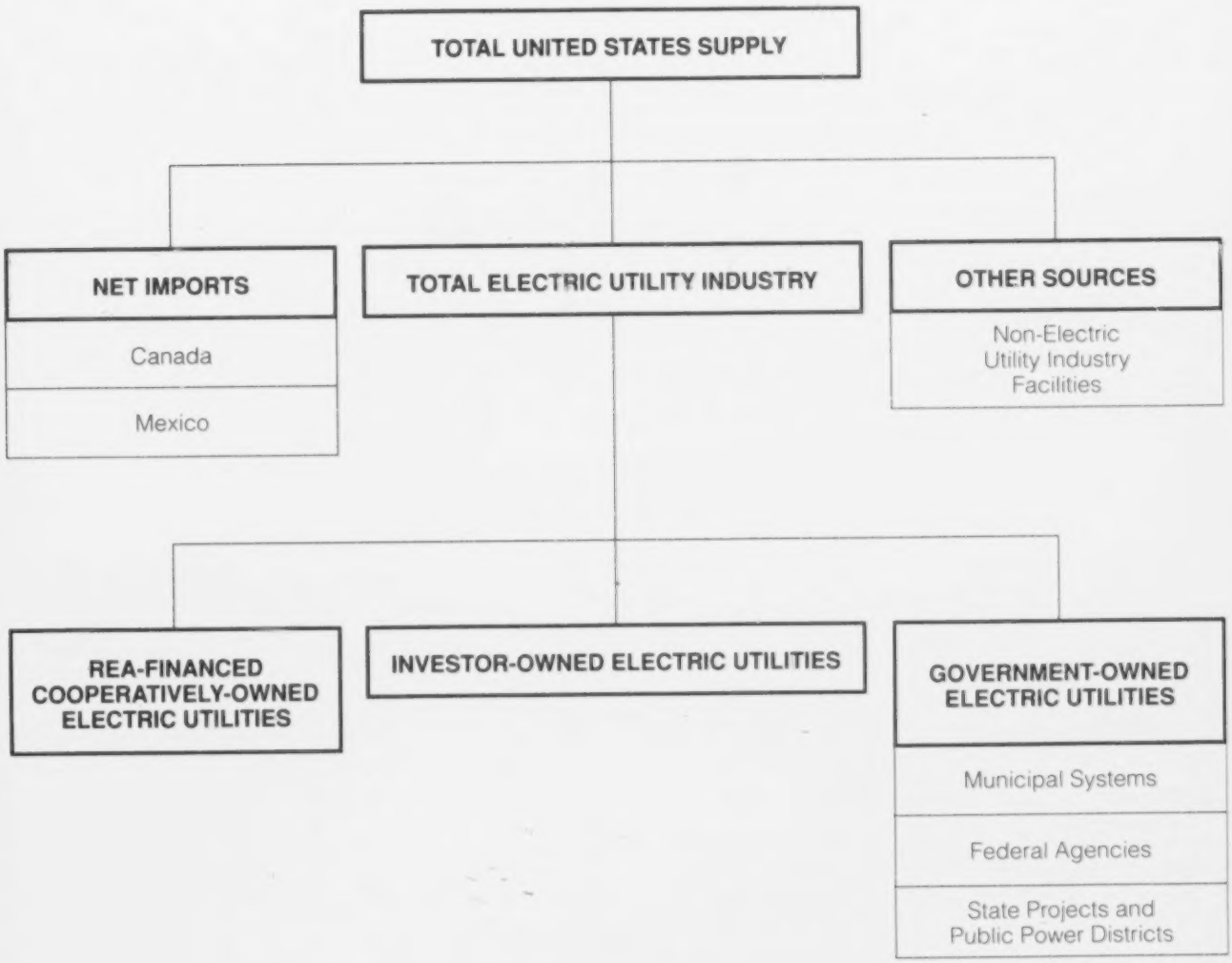
Total interest charges equalled $15.6 billion, up 4.2 percent when compared to 1989. The average interest rate on new long-term debt issued during 1990 was 9.8 percent.

Since 1976 long-term debt as a percentage of total capitalization has gradually declined from 51.9 to 49.0 percent in 1990. During this same period, common capital stock equity increased from 35.5 to 43.8 percent.

The average common stock dividend payout ratio before extraordinary items increased to 90.9 percent in 1990 from 86.2 percent in 1989. The earned return on average common equity before extraordinary items averaged 13.3 percent, down from 14.2 percent in 1989. During 1990, the investor-owned electric utilities were granted an estimated $2.3 billion in rate increases on an annualized basis. This is 22.2 percent increase over the $1.9 billion granted in 1989. AFUDC as a percentage of net income after preferred dividends and before common dividends was 13.3 percent.

In 1990 the investor-owned electric utilities raised $6.5 billion in new long-term financing, a 31.6 percent decrease from 1989. Of this total, 86.4 percent was long-term debt, 10.2 percent was preferred stock and the remaining 3.4 percent was common stock.

UNITED STATES SOURCES OF ELECTRIC GENERATION BY TYPE OF OWNERSHIP



	Total Electric Utility Industry			
			Increase	
	1990	1989	Amount	Percent
GENERATING CAPACITY — SECTION I (kW in Thousands)				
Hydro	87,553p	87,506	47	0.1
Conventional Steam	531,032p	529,144	1,888	0.4
Nuclear Steam	108,242p	106,748	1,494	1.4
Internal Combustion	8,298p	7,482	816	10.9
Wind and Solar	4p	4	0	0.0
Total Generating Capacity	735,129p	730,883	4,246	0.6
ELECTRIC POWER SUPPLY — SECTION II (kW in Thousands)				
Capability at Time of Summer Peak Load (Contiguous U.S.)	685,091	673,316	11,775	1.7
Non-Coincident Summer Peak Load (Contiguous U.S.)	545,537	523,432	22,105	4.2
Capacity Margin (Contiguous U.S.)	20.4%	22.3%		
GENERATION — SECTION III (kWh in Millions)				
Hydro	279,839	265,063	14,776	5.6
Conventional Steam	1,948,566	1,988,003	(39,437)	(2.0)
Nuclear Steam	576,862	529,355	47,507	9.0
Internal Combustion	1,788	1,880	(92)	(4.9)
Wind and Solar	3	3	0	0.0
Total Generation	2,807,058p	2,784,304r	22,754	0.8
Received from Industrial Sources	116,805p	93,677r	23,128	24.7
Imports from Canada and Mexico	22,506	26,110	(3,604)	(13.8)
Total Energy Input†	2,946,369p	2,904,091r	42,278	1.5
FUEL — SECTION IV				
Average Cost of Fuel per Net kWh	1.80¢	1.79¢	0.01¢	0.6
Lbs. of Coal per Net kWh Generated	0.990p	0.987r	0.003	0.3
Average Btu per Net kWh Generated	10,367	10,312	55	0.5
ENERGY — SECTION V (Btus in Quadrillion)				
Annual Production of Energy	67.59p	66.06r	1.53	2.3
Total Energy Supply & Disposition	86.35p	86.11r	0.24	0.3
ENERGY SALES — SECTION VI (kWh in Millions)				
Residential	910,236p	898,802r	11,494	1.3
Commercial	734,584p	715,915r	18,669	2.6
Industrial	926,161p	912,772r	13,389	1.5
Street and Highway Lighting	14,883p	14,570r	313	2.1
Other	81,380p	78,944r	2,436	3.1
Total Sales to Ultimate Customers	2,667,304p	2,621,003r	46,301	1.8
Exports to Canada and Mexico	20,526	15,135	5,391	35.6
Energy Accounted for but Not Sold	9,610p	12,887r	(3,277)	(25.4)
Lost and Unaccounted for	248,929p	255,066r	(6,137)	(2.4)
Total Disposition of Energy†	2,946,369p	2,904,091r	42,278	1.5
kWh Used per Customer (Average for Year)				
Residential	9,472p	9,470r	2	0.0
Commercial	61,061p	60,576r	485	0.8
Industrial	1,770,513p	1,793,286r	(22,773)	(1.3)
Total Ultimate Customer	24,463p	24,359r	104	0.4
CUSTOMERS AT YEAR END — SECTION VII (Thousands)				
Residential	96,771p	95,616r	1,155	1.2
Commercial	12,105p	11,976r	129	1.1
Industrial	513p	507r	6	1.2
Street and Highway Lighting	180p	176r	4	2.3
Other	197p	193r	4	2.1
Total Ultimate Customers	109,766p	108,468r	1,298	1.2
REVENUES — SECTION VIII (Millions of Dollars)				
Residential	$ 71,174p	$ 68,760r	$ 2,414	3.5
Commercial	53,875p	51,562r	2,313	4.5
Industrial	44,778p	43,746r	1,032	2.4
Street and Highway Lighting	1,582p	1,544r	38	2.5
Other	4,094p	4,015r	79	2.0
Total Revenues from Ultimate Customers	$ 175,503p	$ 169,627r	$ 5,876	3.5
Exports to Canada and Mexico	461	276	185	67.0
Total Revenues from Sales of Energy	$ 175,964p	$ 169,903r	$ 6,061	3.6
Average Annual Revenue per Customer				
Residential	$ 740.60p	$ 724.50r	$ 16.10	2.2
Commercial	$4,478.30p	$4,362.81r	$115.49	2.6
Total Ultimate Customers	$1,609.65p	$1,576.46r	$ 33.19	2.1
Average Revenue per kWh				
Residential	7.82¢p	7.65¢r	0.17¢	2.2
Commercial	7.33¢p	7.20¢r	0.13¢	1.8
Total Ultimate Customers	6.58¢p	6.47¢r	0.11¢	1.7
ECONOMICS & OTHER — SECTION X				
Miles of Overhead Electric Line, 22kV and Above	631,893p	628,159r	3,734	0.6
Employees of Investor-Owned Electric Utilities (Year-End)	510,595p	513,534r	(2,939)	(0.6)
Plant Ratio-kWh Generated/kW of Capacity‡	3,830p	3,773r	57	1.5

Note: Total may not equal sum of components due to independent rounding.
† Excludes industrial for own use. ‡On basis of installed nameplate capacity.
p Preliminary r Revised ( ) Denotes negative value.

FINANCIAL — SECTION IX (Millions of Dollars)	Investor-Owned Electric Utilities 1990	1989	Increase Amount	Percent
COMBINED BALANCE SHEETS				
ASSETS				
Utility Plant:				
Electric	$459,801p	$433,958	$25,843	6.0
Other	28,179p	23,666	4,513	19.1
Total Utility Plant	487,980p	457,624	30,356	6.6
Accumulated Provision for Depreciation and Amortization	147,136p	135,544	11,592	8.6
Net Utility Plant	340,844p	322,079	18,765	5.8
Nuclear Fuel	20,162p	19,873	289	1.5
Accumulated Provision for Amortization of Nuclear Fuel Assemblies	12,516p	11,514	1,002	8.7
Net Nuclear Fuel	7,646p	8,359	(713)	(8.5)
Construction Work in Progress	23,700p	35,206	(11,506)	(32.7)
Net Total Utility Plant	372,190p	365,644	6,546	1.8
Other Property and Investment	20,636p	18,768	1,868	10.0
Total Current and Accrued Assets	42,766p	43,840	(1,074)	(2.4)
Total Deferred Debits	36,312p	33,404	2,908	8.7
Total Assets	$471,905p	$461,657	$10,248	2.2
CAPITALIZATION AND LIABILITIES				
Capitalization:				
Common Capital Stock	$ 56,884p	$ 57,329	$ (445)	(0.8)
Other Paid-In Capital Excluding Retained Earnings	37,135p	35,667	1,468	4.1
Retained Earnings	54,096p	52,422	1,674	3.2
Total Common Capital Stock Equity	148,115p	145,418	2,697	1.9
Preferred Stock	24,189p	25,512	(1,323)	(5.2)
Total Long-Term Debt	165,686p	164,705	981	0.6
Total Capitalization	337,991p	335,636	2,355	0.7
Total Other Non-Current Liabilities	5,225p	5,425	(200)	(3.7)
Total Current and Accrued Liabilities	52,064p	46,081	5,983	13.0
Total Deferred Credits and Operating Reserves	28,615p	28,818	(203)	(0.7)
Contributions in Aid of Construction	102p	110	(8)	(7.3)
Deferred Income Taxes	47,908p	45,588	2,320	5.1
Total Liabilities	$471,905p	$461,657	$10,248	2.2
COMBINED INCOME STATEMENTS				
Operating Revenues — Electric Department	$146,211p	$140,883	$ 5,328	3.8
Operation and Maintenance Expenses	81,577p	77,467	4,110	5.3
Depreciation, Depletion, Amortization and Property Losses	15,372p	15,629	(257)	(1.6)
Deferred Expenses	(323)p	(727)	404	N/M
Taxes	20,271p	18,988	1,283	6.8
Total Operating Expenses	116,898p	111,360	5,538	5.0
Operating Income	29,313p	29,523	(210)	(0.7)
Other Income (Non-Operating), Net	1,489p	1,762	(273)	(15.5)
Other Departments	1,429p	1,398	31	2.2
Income Before Interest Charges (Gross Income)	32,231p	32,683	(452)	(1.4)
Net Interest Charges	15,628p	15,002	626	4.2
Income Before Extraordinary Items	16,603p	17,682	(1,079)	(6.1)
Extraordinary Items	182p	(137)	319	N/M
Net Income	16,784p	17,544	(760)	(4.3)
Preferred Dividend Charges	1,944p	2,363	(419)	(17.7)
Available for Common Stock	14,840p	15,182	(342)	(2.3)
Common Dividends	13,323p	13,198	125	0.9
Net Income After Dividends	$ 1,518p	$ 1,984	$ (466)	(23.5)
Electric Utility Financing:				
Long-Term Debt	$ 7,318	$ 10,994	$ (3,676)	(33.4)
Preferred Stock	716	720	(4)	(0.6)
Common Stock	217	772	(555)	(71.9)
Total Capital	$ 8,250	$ 12,486	$ (4,236)	(33.9)
Construction Expenditures:				
Production	$ 8,881p	$ 9,903	$ (1,022)	(10.3)
Transmission	2,472p	2,512	(40)	(1.6)
Distribution	9,118p	8,685	433	5.0
Other	2,167p	1,997	170	8.5
Total	$ 22,639p	$ 23,097	$ (458)	(2.0)

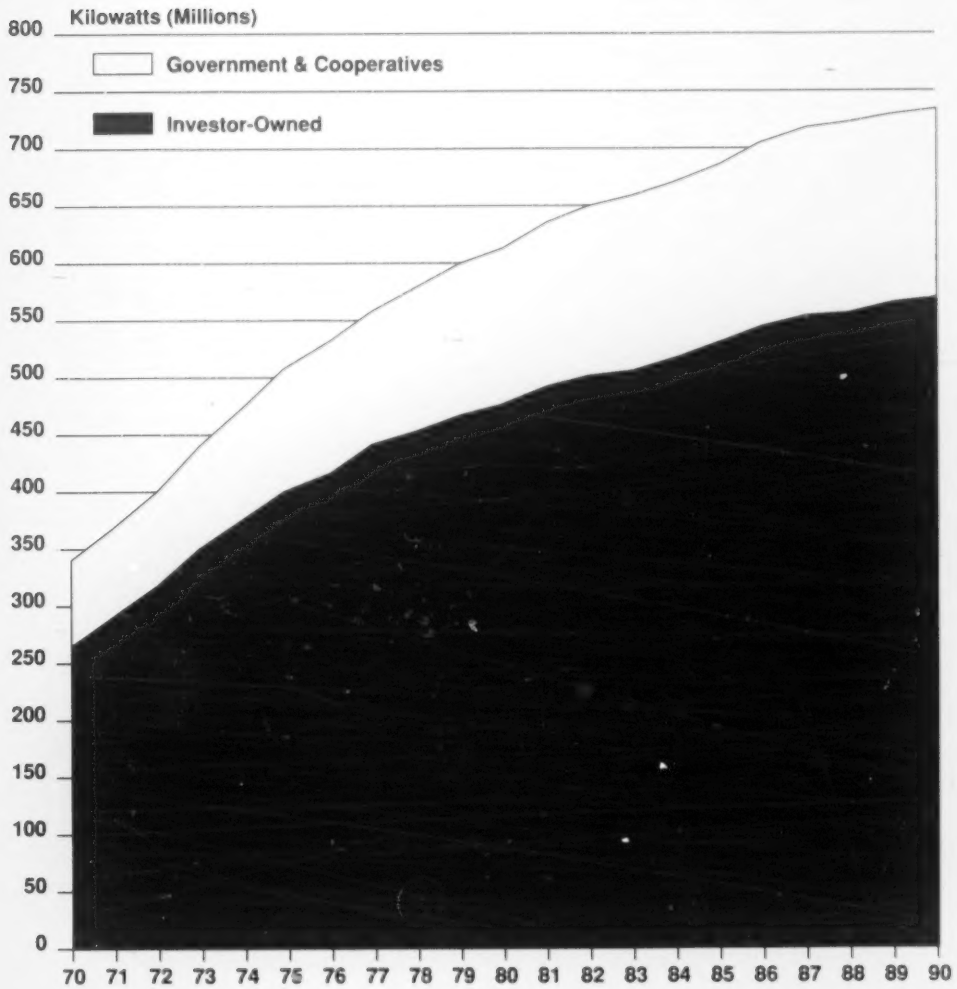
Note: Total may not equal sum of components due to independent rounding.
p Preliminary. r Revised. ( ) Denotes negative Value. N/M Not Meaningful.

SECTION I
GENERATING CAPACITY

CHART I-A

INSTALLED GENERATING CAPACITY

TOTAL UNITED STATES



Based on Table 1, page 7.
Sources: U.S. Department of Energy, Energy Information Administration, Monthly Power Plant Report *(EIA-759),* Annual Electric Generator Report *(EIA-860) and* Annual Electric Utility Report *(EIA-861).*

TABLE 1

INSTALLED GENERATING CAPACITY IN THE UNITED STATES

KILOWATTS IN THOUSANDS (NAMEPLATE)

At December 31st	Investor-Owned Utilities	Government and Cooperatives	Total Electric Utility Industry	Other Sources*	Total United States
1990p	**567,352**	**167,778**	**735,129**	**N/A**	**735,129****
1989	562,127	168,757	730,883	40,267r	771,150r
1988	557,756	166,097	723,852	33,741	757,593
1987	552,795	165,261	718,056	30,015	748,071
1986	544,199	163,485	707,684	25,321	733,005
1985	530,405	158,328	688,733	22,920	711,653
1984	514,863	157,600	672,462	17,371e	689,833
1983	505,487	152,695	658,182	16,765e	674,947
1982	499,111	150,994	650,105	16,938e	667,043
1981	490,767	144,041	634,808	17,142e	651,950
1980	477,083	136,612	613,695	17,323e	631,018
1979	464,144	134,299	598,443	17,436	615,879
1978	453,647	125,665	579,312	19,391	598,703
1977	438,385	121,976	560,361	19,245	579,606
1976	415,504	115,658	531,162	19,113	550,275
1975	399,036	109,378	508,414	19,177	527,591
1974	376,122	100,046	476,168	19,351	495,519
1973	346,476	93,399	439,875	19,377	459,252
1972	314,353	84,400	398,753	18,768	417,521
1971	288,301	80,779	369,080	19,297	388,377
1970	262,675	78,415	341,090	19,237	360,327

Note: Total may not equal sum of components due to independent rounding.

** Includes non-electric utility industry facilities.*

*** Excludes Other Sources.*

N/A Not Available.

p Preliminary. r Revised. e Estimated.

Sources: U.S. Department of Energy, Energy Information Administration, Monthly Power Plant Report (EIA-759), Annual Electric Generator Report (EIA-860), Annual Electric Utility Report (EIA-861), *and Edison Electric Institute.*

TABLE 2

INSTALLED GENERATING CAPACITY TOTAL ELECTRIC UTILITY INDUSTRY

BY OWNERSHIP AND TYPE OF PRIME MOVER DRIVING THE GENERATOR
KILOWATTS IN THOUSANDS (NAMEPLATE)

At December 31st	Total Electric Utility Industry	Investor-Owned Utilities	Cooperatives	Subtotal Government	Municipal Utilities	Federal	Power Districts, State Projects
TOTAL (Capacity of Generators Driven by All Types of Prime Mover)							
1990p	**735,129**	**567,352**	**26,332**	**141,446**	**39,734**	**67,193**	**34,518**
1989	730,883	562,127	26,358	142,399	40,668	67,193	34,537
1988	723,852	557,756	26,383	139,714	40,388	64,792	34,533
1987	718,056	552,795	26,359	138,902	39,378	64,666	34,858
1986	707,684	544,199	26,430	137,055	38,584	63,864	34,607
1985	688,733	530,405	24,574	133,754	37,017	63,710	33,027
1984	672,462	514,863	24,738	132,862	36,717	63,304	32,841
1983	658,182	505,487	22,202	130,493	36,598	62,973	30,923
1982	650,105	499,111	21,463	129,530	35,819	62,544	31,168
1981	634,808	490,767	18,406	125,635	35,125	60,982	29,527
1980	613,695	477,083	15,422	121,190	34,598	59,083	27,509
1979	598,443	464,144	13,837	120,462	34,525	58,346	27,591
1978	579,312	453,647	11,635	114,030	34,426	54,282	25,322
1977	560,361	438,385	10,889	111,087	33,291	53,183	24,613
1976	531,162	415,504	9,947	105,711	30,602	51,707	23,402
1975	508,414	399,036	9,136	100,242	28,787	50,133	21,322
1974	476,168	376,122	7,474	92,572	27,324	45,518	19,730
1973	439,875	346,476	7,288	86,111	24,956	44,520	16,635
1972	398,753	314,353	6,704	77,696	23,049	40,408	14,239
1971	369,080	288,301	5,470	75,309	21,992	39,656	13,661
1970	341,090	262,675	5,162	73,253	20,941	38,718	13,594
HYDRO (Capacity of Generators Driven by Water Wheels and Turbines)							
1990p	**87,553**	**29,676**	**169**	**57,708**	**5,553**	**39,237**	**12,919**
1989	87,506	29,651	169	57,685	5,548	39,237	12,900
1988	86,886	29,680	169	57,037	5,467	38,713	12,856
1987	85,910	29,149	113	56,648	5,401	38,438	12,809
1986	85,165	28,949	116	56,100	5,952	37,636	12,512
1985	83,015	27,571	104	55,340	5,159	37,631	12,550
1984	80,590	26,127	81	54,382	4,850	37,139	12,393
1983	78,968	24,977	81	53,910	4,781	36,803	12,326
1982	78,128	24,584	81	53,464	4,729	36,378	12,357
1981	77,145	24,319	67	52,759	4,686	35,891	12,182
1980	76,378	24,227	67	52,084	4,692	35,212	12,180
1979	75,351	23,916	67	51,368	4,693	34,495	12,180
1978	71,014	23,847	67	47,100	4,694	30,431	11,975
1977	68,762	23,158	67	45,537	4,431	29,332	11,774
1976	67,757	23,134	67	44,556	4,010	29,031	11,515
1975	65,949	23,115	67	42,767	3,760	27,480	11,527
1974	63,560	22,737	54	40,769	3,814	25,447	11,508
1973	61,782	21,770	56	39,956	3,334	25,582	11,040
1972	56,386	19,122	54	37,210	3,330	24,336	9,544
1971	55,912	19,076	54	36,782	3,260	24,056	9,466
1970	55,056	18,850	56	36,150	3,195	23,499	9,456
CONVENTIONAL STEAM (Capacity of Generators Driven by Steam Engines and Turbines)							
1990p	**531,032**	**435,083**	**25,874**	**70,075**	**30,902**	**22,058**	**17,115**
1989	529,144	433,140	25,898	70,106	30,896	22,058	17,152
1988	526,564	432,556	25,916	68,091	30,722	20,177	17,192
1987	524,286	431,677	25,950	66,659	29,629	20,326	16,704
1986	524,136	432,601	25,963	65,571	28,495	20,326	16,750
1985	520,299	433,103	24,098	63,098	27,764	20,177	15,156
1984	516,537	429,047	24,278	63,212	27,788	20,244	15,181
1983	507,136	422,944	21,767	62,424	27,737	20,244	14,444
1982	503,804	420,863	21,011	61,930	27,026	20,246	14,658
1981	491,287	413,571	17,939	59,778	26,199	20,392	13,187
1980	475,276	403,031	14,954	57,291	25,697	20,393	11,201
1979	462,999	392,349	13,375	57,275	25,599	20,378	11,298
1978	449,231	383,024	11,073	55,134	25,511	20,378	9,245
1977	436,426	371,976	10,429	54,021	24,590	20,378	9,053
1976	415,181	355,263	9,061	50,857	22,396	20,355	8,106
1975	397,649	340,907	8,264	48,478	20,843	20,332	7,303
1974	375,940	323,490	7,017	45,433	20,395	18,899	6,139
1973	352,072	303,536	6,836	41,700	18,511	18,917	4,272
1972	322,201	279,129	6,254	36,818	16,895	16,052	3,871
1971	299,996	260,016	5,018	34,962	16,026	15,576	3,360
1970	275,191	236,792	4,761	33,638	15,141	15,194	3,303

See page 9 for footnotes.

TABLE 2 (continued)

INSTALLED GENERATING CAPACITY TOTAL ELECTRIC UTILITY INDUSTRY

BY OWNERSHIP AND TYPE OF PRIME MOVER DRIVING THE GENERATOR
KILOWATTS IN THOUSANDS (NAMEPLATE)

At December 31st	Total Electric Utility Industry	Investor-Owned Utilities	Cooperatives	Subtotal Government	Municipal Utilities	Federal	Power Districts, State Projects
NUCLEAR STEAM (Capacity of Generators Driven by Nuclear Reactors)							
1990p	**108,242**	**97,911**	**—**	**10,331**	**—**	**5,897**	**4,434**
1989	106,748	95,454	—	11,294	963	5,897	4,434
1988	103,397	92,103	—	11,294	963	5,897	4,434
1987	101,604	89,450	—	12,154	963	5,897	5,294
1986	92,417	80,213	50	12,154	963	5,897	5,294
1985	80,397	68,238	50	12,109	963	5,897	5,249
1984	70,484	58,380	50	12,054	963	5,897	5,194
1983	67,073	56,069	50	10,954	963	5,897	4,094
1982	63,042	52,038	50	10,954	963	5,897	4,094
1981	60,776	50,992	50	9,734	963	4,677	4,094
1980	56,488	47,960	50	8,478	963	3,456	4,059
1979	54,593	46,065	50	8,478	963	3,456	4,059
1978	53,527	44,984	65	8,478	963	3,456	4,059
1977	49,880	41,654	55	8,171	963	3,456	3,752
1976	42,918	35,419	480	7,019	963	2,304	3,752
1975	39,754	33,539	480	5,735	963	2,304	2,468
1974	31,662	28,397	55	3,210	—	1,152	2,058
1973	21,118	19,766	53	1,299	—	—	1,299
1972	15,302	14,449	53	800	—	—	800
1971	8,688	7,833	55	800	—	—	800
1970	6,493	5,693	—	800	—	—	800
INTERNAL COMBUSTION (Capacity of Generators Driven by Internal Combustion Engines)							
1990p	**8,298**	**4,680**	**288**	**3,329**	**3,276**	**1**	**52**
1989	7,482	3,880	290	3,311	3,258	1	52
1988	6,999	3,416	298	3,285	3,233	—	52
1987	6,212	2,484	296	3,432	3,381	—	52
1986	5,944	2,420	301	3,224	3,171	—	52
1985	5,001	1,477	322	3,202	3,130	*	72
1984	4,841	1,306	330	3,205	3,115	17	73
1983	4,996	1,494	304	3,198	3,117	22	58
1982	5,131	1,627	321	3,182	3,101	22	60
1981	5,600	1,885	351	3,364	3,278	22	65
1980	5,553	1,865	351	3,337	3,246	22	69
1979	5,500	1,814	345	3,341	3,270	17	54
1978	5,540	1,792	430	3,318	3,258	17	43
1977	5,293	1,597	338	3,358	3,307	17	34
1976	5,306	1,688	339	3,279	3,233	17	29
1975	5,062	1,475	325	3,262	3,221	17	24
1974	5,006	1,498	348	3,160	3,115	20	25
1973	4,903	1,404	343	3,156	3,111	21	24
1972	4,864	1,653	343	2,868	2,824	20	24
1971	4,484	1,376	343	2,765	2,706	24	35
1970	4,350	1,340	345	2,665	2,605	25	35
WIND† (Capacity of Generators Driven by Wind Turbines)							
1990p	*	*	*	*	*	*	—
1989	*	*	*	*	*	*	—
1988	4	*	*	4	*	4	—
1987	26	22	—	4	*	4	—
1986	8	3	—	4	*	4	—
1985	7	3	—	4	*	4	—
1984	10	3	—	7	*	7	—
SOLAR‡ (Capacity of Generators Driven by Photovoltaic and Solar Thermal Energy)							
1990p	**3**	*	**—**	**2**	**2**	**—**	**—**
1989	3	1	—	2	2	—	—
1988	2	*	—	2	2	—	—
1987	17	13	—	4	4	—	—
1986	15	13	—	2	2	—	—
1985	14	13	—	1	1	—	—
1984	1	—	—	1	1	—	—

Note: Total may not equal sum of components due to independent rounding.
** Less than five hundred kilowatts.*
† Prior to 1983 capacity by wind not available.
‡ Prior to 1984 capacity by solar not available.
p Preliminary.
Sources: U.S. Department of Energy. Energy Information Administration. Monthly Power Plant Report *(EIA-759),* Annual Electric Power Report *(EIA-860), and* Annual Electric Utility Report *(EIA-861).*

TABLE 3

INSTALLED GENERATING CAPACITY TOTAL ELECTRIC UTILITY INDUSTRY

BY STATE AND TYPE OF PRIME MOVER DRIVING THE GENERATOR
AT DECEMBER 31st, 1989 and 1990 — KILOWATTS IN THOUSANDS (NAMEPLATE)

	Total Electric Utility Industry†		Hydro		Conventional Steam		Nuclear Steam		Internal Combustion	
State/Division	1990p	1989	1990p	1989	1990p	1989	1990p	1989	1990p	1989
Total United States	**735,129**	**730,883**	**87,553**	**87,506**	**531,032**	**529,144**	**108,242**	**106,748**	**8,298**	**7,482**
Maine	2,421	2,396	383	358	1,104	1,104	890	890	44	44
New Hampshire	2,647	1,405	262	262	1,143	1,143	1,242	—	—	—
Vermont	1,111	1,106	357	352	170	170	563	563	20	20
Massachusetts	10,056	10,057	1,648	1,648	7,322	7,322	863	863	223	224
Rhode Island	273	273	2	2	243	243	—	—	29	29
Connecticut	7,431	7,431	133	133	3,491	3,491	3,425	3,425	382	382
New England	**23,939**	**22,668**	**2,784**	**2,754**	**13,473**	**13,473**	**6,983**	**5,741**	**699**	**700**
New York	33,413	33,401	5,042	5,030	23,022	23,022	5,234	5,234	115	115
New Jersey	14,862	14,771	387	387	10,216	10,216	4,160	4,160	99	8
Pennsylvania	36,938	36,938	1,858	1,858	25,504	25,504	9,511	9,511	65	65
Middle Atlantic	**85,212**	**85,109**	**7,287**	**7,275**	**58,741**	**58,741**	**18,905**	**18,905**	**280**	**189**
Ohio	27,604	27,525	119	119	25,153	25,074	2,215	2,215	117	117
Indiana	22,902	22,902	92	92	22,651	22,651	—	—	158	158
Illinois	36,869	36,870	12	12	22,404	22,405	13,734	13,734	719	719
Michigan	24,098	24,101	2,343	2,343	17,073	17,073	4,326	4,326	356	359
Wisconsin	10,993	10,993	447	447	8,860	8,860	1,583	1,583	103	103
East North Central	**122,466**	**122,391**	**3,012**	**3,012**	**96,142**	**96,064**	**21,858**	**21,858**	**1,454**	**1,457**
Minnesota	9,187	9,190	137	137	7,039	7,039	1,755	1,755	256	259
Iowa	8,596	8,491	130	130	7,390	7,391	597	597	479	373
Missouri	16,731	16,712	1,064	1,064	14,055	14,055	1,236	1,236	376	357
North Dakota	4,677	4,677	517	517	4,135	4,135	—	—	25	25
South Dakota	2,653	2,656	1,705	1,705	893	893	—	—	55	58
Nebraska	5,698	5,698	183	183	3,919	3,919	1,338	1,338	258	258
Kansas	10,762	10,783	2	2	8,956	8,978	1,236	1,236	570	568
West North Central	**58,304**	**58,207**	**3,738**	**3,738**	**46,386**	**46,410**	**6,161**	**6,161**	**2,018**	**1,898**
Delaware	2,131	2,131	—	—	2,122	2,122	—	—	9	9
Maryland	10,515	10,431	494	494	7,789	7,789	1,829	1,829	404	320
District of Columbia	868	868	—	—	868	868	—	—	—	—
Virginia	14,611	14,034	3,058	3,058	7,374	7,302	3,655	3,655	525	20
West Virginia	15,078	15,078	101	101	14,977	14,977	—	—	—	—
North Carolina	20,899	20,901	1,948	1,948	13,824	13,824	5,125	5,125	2	4
South Carolina	16,310	16,310	2,348	2,348	7,161	7,161	6,799	6,799	1	1
Georgia	23,052	23,052	2,433	2,433	16,150	16,150	4,130	4,130	339	339
Florida	36,174	36,211	43	43	30,756	30,793	4,110	4,110	1,265	1,265
South Atlantic	**139,637**	**139,016**	**10,425**	**10,425**	**101,020**	**100,985**	**25,648**	**25,648**	**2,545**	**1,958**
Kentucky	17,345	16,779	746	746	16,584	16,018	—	—	14	14
Tennessee	18,213	18,213	3,717	3,717	12,054	12,054	2,441	2,441	—	—
Alabama	21,253	20,547	2,857	2,857	13,163	12,457	5,233	5,233	—	—
Mississippi	7,186	7,186	—	—	5,734	5,734	1,373	1,373	79	79
East South Central	**63,996**	**62,724**	**7,321**	**7,321**	**47,536**	**46,264**	**9,046**	**9,046**	**93**	**93**
Arkansas	9,834	9,834	1,160	1,160	6,791	6,791	1,845	1,845	37	37
Louisiana	18,012	18,012	—	—	15,664	15,664	2,236	2,236	112	112
Oklahoma	13,589	13,589	968	968	12,486	12,486	—	—	136	136
Texas	66,155	64,765	620	620	61,423	61,268	3,924	2,709	188	168
West South Central	**107,589**	**106,199**	**2,748**	**2,748**	**96,363**	**96,208**	**8,005**	**6,790**	**473**	**453**
Montana	4,929	4,929	2,269	2,269	2,659	2,659	—	—	—	—
Idaho	2,063	2,063	2,008	2,008	50	50	—	—	5	5
Wyoming	5,865	5,865	258	258	5,590	5,590	—	—	18	18
Colorado	6,704	6,704	1,039	1,039	5,585	5,585	—	—	80	80
New Mexico	5,562	5,562	55	55	5,492	5,492	—	—	15	15
Arizona	16,485	16,112	2,685	2,685	9,586	9,213	4,210	4,210	4	4
Utah	5,211	5,209	222	222	4,914	4,914	—	—	76	74
Nevada	5,085	5,085	984	984	4,039	4,039	—	—	62	62
Mountain	**51,905**	**51,530**	**9,519**	**9,519**	**37,916**	**37,543**	**4,210**	**4,210**	**260**	**258**
Washington	23,265	23,258	19,848	19,841	2,213	2,213	1,200	1,200	4	4
Oregon	10,606	10,606	8,113	8,113	1,272	1,272	1,216	1,216	6	6
California	44,913	45,876	12,513	12,513	27,341	27,341	5,011	5,974	45	45
Pacific	**78,784**	**79,740**	**40,474**	**40,467**	**30,826**	**30,826**	**7,427**	**8,390**	**55**	**55**
Alaska	1,764	1,764	242	242	1,248	1,248	—	—	274	274
Hawaii	1,535	1,535	3	3	1,383	1,383	—	—	149	149
Alaska & Hawaii	**3,299**	**3,299**	**245**	**245**	**2,631**	**2,631**	**—**	**—**	**422**	**422**

Note: Total may not equal sum of components due to independent rounding.
† Total includes wind turbine capacity (1989 — 0.5 kW in thousands; 1990 — 0.4 kW in thousands) and solar energy capacity (1989 — 3.4 kW in thousands; 1990 — 3.4 kW in thousands).
p Preliminary.
Sources: U.S. Department of Energy, Energy Information Administration, Annual Electric Generator Report (EIA-860), and Annual Electric Utility Report (EIA-861).

TABLE 4

INSTALLED GENERATING CAPACITY INVESTOR-OWNED ELECTRIC UTILITIES

BY STATE AND TYPE OF PRIME MOVER DRIVING THE GENERATOR
AT DECEMBER 31st, 1989 and 1990 — KILOWATTS IN THOUSANDS (NAMEPLATE)

	Total Investor-Owned Utilities†		Hydro		Conventional Steam		Nuclear Steam		Internal Combustion	
State/Division	1990p	1989	1990p	1989	1990p	1989	1990p	1989	1990p	1989
Total United States	**567,352**	**562,127**	**29,676**	**29,651**	**435,083**	**433,140**	**97,911**	**95,454**	**4,680**	**3,880**
Maine	2,418	2,393	383	358	1,104	1,104	890	890	41	41
New Hampshire	2,647	1,405	262	262	1,143	1,143	1,242	—	—	—
Vermont	1,005	1,005	332	332	92	92	563	563	18	18
Massachusetts	9,164	9,165	1,645	1,645	6,503	6,503	863	863	152	153
Rhode Island	271	271	—	—	243	243	—	—	29	29
Connecticut	7,373	7,373	130	130	3,452	3,452	3,425	3,425	367	367
New England	**22,878**	**21,612**	**2,752**	**2,727**	**12,537**	**12,537**	**6,983**	**5,741**	**607**	**608**
New York	26,338	26,338	894	894	22,063	22,063	3,338	3,338	43	43
New Jersey	14,764	14,673	387	387	10,118	10,118	4,160	4,160	99	8
Pennsylvania	36,916	36,916	1,836	1,836	25,504	25,504	9,511	9,511	65	65
Middle Atlantic	**78,018**	**77,927**	**3,117**	**3,117**	**57,685**	**57,685**	**17,009**	**17,009**	**208**	**117**
Ohio	24,816	24,746	48	48	22,480	22,410	2,215	2,215	74	74
Indiana	21,342	21,342	92	92	21,114	21,114	—	—	137	137
Illinois	35,736	35,736	12	12	21,521	21,521	13,734	13,734	469	469
Michigan	22,571	22,574	2,304	2,304	15,790	15,790	4,326	4,326	151	154
Wisconsin	9,757	9,757	404	404	7,743	7,743	1,583	1,583	27	27
East North Central	**114,222**	**114,155**	**2,859**	**2,859**	**88,647**	**88,577**	**21,858**	**21,858**	**858**	**861**
Minnesota	8,272	8,272	132	132	6,380	6,380	1,755	1,755	4	4
Iowa	7,427	7,322	127	127	6,578	6,578	597	597	126	21
Missouri	12,060	12,041	596	596	10,180	10,180	1,236	1,236	48	29
North Dakota	607	607	—	—	606	606	—	—	*	*
South Dakota	808	808	*	*	758	758	—	—	49	49
Nebraska	—	—	—	—	—	—	—	—	—	—
Kansas	8,223	8,245	2	2	6,979	7,001	1,236	1,236	6	6
West North Central	**37,395**	**37,294**	**857**	**857**	**31,481**	**31,503**	**4,824**	**4,824**	**234**	**110**
Delaware	1,971	1,971	—	—	1,971	1,971	—	—	—	—
Maryland	10,415	10,331	494	494	7,754	7,754	1,829	1,829	339	255
District of Columbia	868	868	—	—	868	868	—	—	—	—
Virginia	14,365	13,788	2,821	2,821	7,372	7,300	3,655	3,655	517	12
West Virginia	15,078	15,078	101	101	14,977	14,977	—	—	—	—
North Carolina	20,126	20,126	1,481	1,481	13,520	13,520	5,125	5,125	—	—
South Carolina	13,152	13,152	1,846	1,846	4,507	4,507	6,799	6,799	—	—
Georgia	21,488	21,488	886	886	16,132	16,132	4,130	4,130	339	339
Florida	27,455	27,455	*	*	22,345	22,345	4,110	4,110	999	999
South Atlantic	**124,917**	**124,256**	**7,630**	**7,630**	**89,446**	**89,374**	**25,648**	**25,648**	**2,194**	**1,605**
Kentucky	8,546	7,980	110	110	8,435	7,869	—	—	—	—
Tennessee	172	172	172	172	—	—	—	—	—	—
Alabama	12,156	11,450	1,583	1,583	8,797	8,091	1,777	1,777	—	—
Mississippi	6,414	6,414	—	—	4,963	4,963	1,373	1,373	79	79
East South Central	**27,287**	**26,015**	**1,865**	**1,865**	**22,194**	**20,922**	**3,149**	**3,149**	**79**	**79**
Arkansas	8,392	8,392	65	65	6,476	6,476	1,845	1,845	6	6
Louisiana	15,092	15,092	—	—	12,820	12,820	2,236	2,236	36	36
Oklahoma	10,331	10,331	—	—	10,306	10,306	—	—	25	25
Texas	54,814	53,420	91	91	50,763	50,584	3,924	2,709	37	37
West South Central	**88,629**	**87,235**	**156**	**156**	**80,365**	**80,186**	**8,005**	**6,790**	**104**	**104**
Montana	3,633	3,633	974	974	2,659	2,659	—	—	—	—
Idaho	1,369	1,369	1,314	1,314	50	50	—	—	5	5
Wyoming	3,900	3,900	2	2	3,880	3,880	—	—	18	18
Colorado	3,094	3,094	342	342	2,727	2,727	—	—	26	26
New Mexico	5,118	5,118	—	—	5,103	5,103	—	—	15	15
Arizona	8,618	8,245	7	7	4,397	4,024	4,210	4,210	4	4
Utah	2,781	2,781	59	59	2,723	2,723	—	—	—	—
Nevada	4,111	4,111	9	9	4,039	4,039	—	—	62	62
Mountain	**32,623**	**32,250**	**2,706**	**2,706**	**25,578**	**25,205**	**4,210**	**4,210**	**129**	**129**
Washington	3,180	3,180	964	964	2,213	2,213	—	—	3	3
Oregon	3,967	3,967	1,485	1,485	1,260	1,260	1,216	1,216	6	6
California	32,570	32,570	5,267	5,267	22,259	22,259	5,011	5,011	32	32
Pacific	**39,717**	**39,717**	**7,717**	**7,717**	**25,733**	**25,733**	**6,227**	**6,227**	**40**	**40**
Alaska	131	131	16	16	35	35	—	—	80	80
Hawaii	1,535	1,535	3	3	1,383	1,383	—	—	149	149
Alaska & Hawaii	**1,666**	**1,666**	**20**	**20**	**1,418**	**1,418**	**—**	**—**	**228**	**228**

Note: Total may not equal sum of components due to independent rounding.
†Total includes wind turbine capacity (1989 — 0.3 kW in thousands; 1990 — 0.2 kW in thousands) and solar energy capacity (1989 — 1.1 kW in thousands; 1990 — 1.1 kW in thousands).
* Less than five hundred kilowatts.
p Preliminary.
Sources: U.S. Department of Energy, Energy Information Administration, Annual Electric Generator Report *(EIA-860)*, and Annual Electric Utility Report *(EIA-861)*.

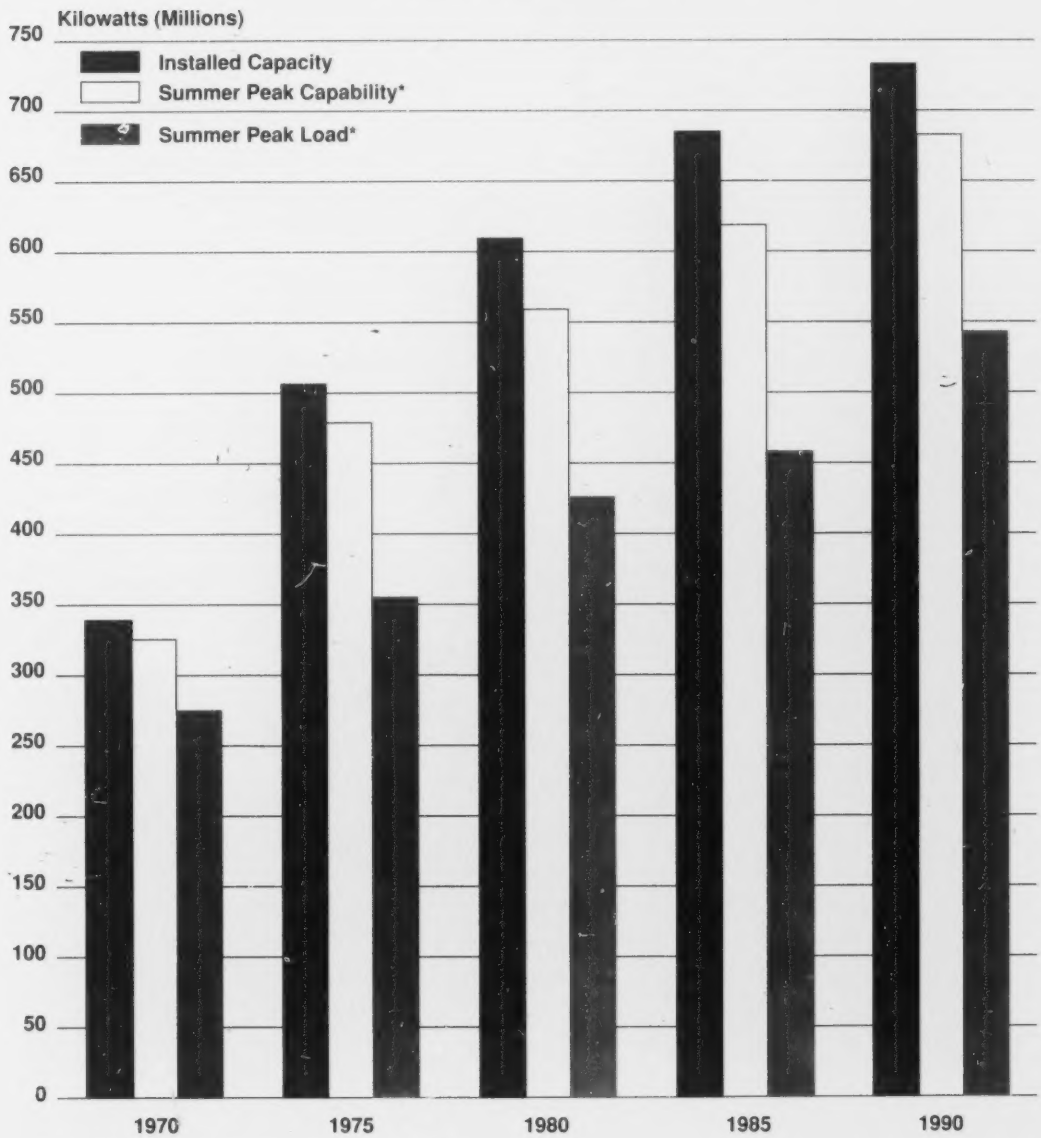
SECTION II

ELECTRIC POWER SUPPLY

CHART II-A

CAPACITY, CAPABILITY & PEAK LOAD

TOTAL ELECTRIC UTILITY INDUSTRY



*Excludes Alaska & Hawaii.
Based on Table 1, page 7 and Table 7, page 13.
Sources: U.S. Department of Energy, Energy Information Administration, Monthly Power Plant Report *(EIA-759),* Annual Electric Generator Report *(EIA-860) and* Annual Electric Monthly Report *(EIA-861);*
Edison Electric Institute, Electric Power Annual Report.

TABLE 7

CAPABILITY*— PEAK LOAD — KILOWATTHOUR REQUIREMENTS TOTAL ELECTRIC UTILITY INDUSTRY

(EXCLUDING ALASKA AND HAWAII)

Year	Capability at Time of Summer Peak Load (MW)	Non-Coincident Summer Peak Load (MW)	Capability at Time of Winter Peak Load (MW)†	Non-Coincident Winter Peak Load (MW)†	Capacity Margin Based on Non-Coincident Peak Load (%)†‡	Annual Kilowatthour Requirements (in Millions)	Annual Load Factor Based on Peak Load (%)
1990	**685,091**	**545,537**	**696,757**	**484,014**	**20.4**	**2,886,496**	**60.4**
1989	673,316	523,432	685,249	496,378	22.3	2,849,824	62.2
1988	661,580	529,460	676,940	466,533	20.0	2,768,858	59.5
1987	648,118	496,185	662,977	448,277	23.4	2,643,532	60.8
1986	633,291	476,320	646,721	422,857	24.8	2,532,104	60.7
1985	621,597	460,503	636,475	423,660	25.9	2,499,226	62.0
1984	604,240	451,150	622,125	436,374	25.3	2,445,603	59.7
1983	596,449	447,526	612,453	410,779	25.0	2,341,633	59.5
1982	586,142	415,618	598,066	373,985	29.1	2,258,744	62.0
1981	572,219	429,349	586,569	397,800	25.0	2,311,026	61.0
1980	558,237	427,058	572,195	384,567	23.5	2,292,718	61.0
1979	544,506	398,424	554,525	368,876	26.8	2,246,927	64.4
1978	545,700	408,050	561,550	383,100	25.2	2,218,700	62.1
1977	516,000	396,350	537,600	360,200	23.2	2,132,300	61.4
1976	498,750	370,900	511,000	349,850	25.6	2,039,500	62.6
1975	479,300	356,800	492,450	331,100	25.6	1,919,500	61.4
1974	444,400	349,250	467,400	302,500	21.4	1,871,700	61.2
1973	415,500	343,900	433,150	295,150	17.2	1,868,800	62.0
1972	381,700	319,150	394,050	290,950	16.4	1,752,200	62.5
1971	353,250	292,100	366,700	261,650	17.3	1,617,100	63.2
1970	326,900	274,650	339,050	248,550	16.0	1,536,400	63.9

* *Capability represents the maximum kilowatt output with all power sources available and with hydraulic equipment under actual water conditions. It must, therefore, provide the necessary allowance for maintenance, emergency outages, and system operating requirements. This rating is more indicative of the actual generating ability of existing power stations than the familiar nameplate rating as used in other tables of this publication.*

† *Beginning in 1973 capability and peak load data shown under Winter represent turn-of-year data for the winter season that follows the summer peak load data for that calendar year. Previously, data in this series was always for the month of December.*

‡ *Calculated from the maximum non-coincident peak load, summer or winter, and the capability at the time of this peak load. Percent Capacity Margin is the difference between capability and peak load divided by capability multiplied by 100.*

Sources: North American Electric Reliability Council and Edison Electric Institute. All data series shown have a discontinuity between 1978 and 1979 because of the switch to NERC data. For calculation of percent changes between 1978 and 1979, see old series values for 1979 in Table 6 of 1979 edition.

TABLE 8

ELECTRICITY MADE AVAILABLE IN THE UNITED STATES

KILOWATTHOURS IN MILLIONS

Year	Generation					Net Imports of Electric Energy	Total Available in U.S.	Estimated Population† (Thousands) (July 1)	kWh Per Person
	Investor-Owned Utilities	Government and Cooperatives	Total Electric Utility Industry	Other Sources*	Total United States				
1990p	**2,201,007**	**606,052**	**2,807,058**	**N/A**	**2,807,058****	**1,980**	**2,809,038****	**249,466**	**11,260****
1989r	2,191,941	592,364	2,784,304	200,871	2,985,175	10,976	2,996,151	246,828	12,139
1988	2,145,601	558,650	2,704,250	174,252	2,878,502	31,770	2,910,272	244,529r	11,902r
1987	2,022,260	549,867	2,572,127	146,609	2,718,736	46,338	2,765,074	243,427	11,359
1986	1,928,199	559,111	2,487,310	112,008	2,599,318	35,897	2,635,215	241,078	10,931
1985	1,918,032	551,809	2,469,841	98,478	2,568,319	40,936	2,609,255	238,741	10,929
1984	1,848,916	567,388	2,416,304	71,520e	2,487,824	39,661	2,527,485	236,477	10,688
1983	1,764,080	546,205	2,310,285	57,678e	2,367,963	35,330	2,403,293	234,284	10,258
1982	1,711,576	529,635	2,241,211	61,076e	2,302,287	30,744	2,333,031	231,996	10,056
1981	1,785,500	509,312	2,294,812	64,446e	2,359,258	33,584	2,392,842	229,637	10,420
1980	1,782,933	503,481	2,286,414	67,945e	2,354,359	20,925	2,375,284	227,255	10,452
1979	1,756,170	491,189	2,247,359	71,375	2,318,734	20,334	2,339,068	224,567	10,416
1978	1,721,163	485,150	2,206,313	78,967	2,285,280	19,328	2,304,608	222,095	10,377
1977	1,684,084	440,082	2,124,166	87,575	2,211,741	17,415	2,229,156	219,760	10,144
1976	1,582,029	455,645	2,037,674	87,084	2,124,758	8,611	2,133,369	217,563	9,806
1975	1,486,844	430,775	1,917,619	85,362	2,002,981	6,185	2,009,166	215,465	9,325
1974	1,442,114	424,322	1,866,436	101,572	1,968,008	12,694	1,980,702	213,342	9,284
1973	1,448,860	407,356	1,856,216	102,529	1,958,745	14,278	1,973,023	211,357	9,335
1972	1,358,929	390,708	1,749,637	104,508	1,854,145	7,744	1,861,889	209,284	8,896
1971	1,248,596	363,993	1,612,589	103,239	1,715,828	3,530	1,719,358	206,827	8,313
1970	1,183,190	348,419	1,531,609	108,162	1,639,771	1,960	1,641,731	203,984	8,048

Note: Total may not equal sum of components due to independent rounding.

** Includes non-electric utility industry facilities.*

*** Excludes Other Sources.*

† U.S. Department of Commerce, Bureau of Census estimates; excludes Armed Forces overseas.

N/A Not Available.

p Preliminary. r Revised. e Estimated.

Sources: U.S. Department of Energy, Energy Information Administration, Monthly Power Plant Report, (EIA-759), Economic Regulatory Administration, Electricity Transactions Across International Borders, and Edison Electric Institute.

TABLE 9

TOTAL UNITED STATES KILOWATTHOUR SOURCE AND DISPOSITION

1970 - 1990 — KILOWATTHOURS IN MILLIONS

	1990p	1989r	1988	1987	1986	1985	1984
SOURCE							
Generation							
Total Electric Utility Industry	2,807,058	2,784,304	2,704,250	2,572,127	2,487,310	2,469,841	2,416,304
Industrials*	N/A	107,194	104,052	93,981	71,289	70,178	52,125e
Industrials* — Received by Electric Utility Industry	116,805	93,677	70,200	52,628	40,719	28,300	19,395
Total Generation	**2,923,863**	**2,985,175**	**2,878,502**	**2,718,736**	**2,599,318**	**2,568,319**	**2,487,824**
Imports from Canada and Mexico	22,506	26,110	38,837	52,219	40,713	45,901	42,219
Total Kilowatthours	**2,946,369**	**3,011,285**	**2,917,339**	**2,770,955**	**2,640,031**	**2,614,220**	**2,530,043**
DISPOSITION							
Total Sales to Ultimate Customers	2,667,304	2,621,003	2,554,161r	2,435,483	2,354,744	2,305,882	2,280,585
Exports to Canada and Mexico	20,526	15,135	7,067	5,881	4,816	4,965	2,558
Energy Used by Producer	3,021	3,098	1,353	2,112	1,247	1,833	2,849
Company Use & Free Service	6,589	9,789	7,351	8,401	8,536	9,336	10,958
Lost and Unaccounted For	248,929	255,066	243,355r	225,097	199,399	222,026	180,968
Industrials*	N/A	107,194	104,052	93,981	71,289	70,178	52,125e
Total Kilowatthours	**2,946,369**	**3,011,285**	**2,917,339**	**2,770,955**	**2,640,031**	**2,614,220**	**2,530,043**

	1983	1982	1981	1980	1979	1978	1977
SOURCE							
Generation							
Total Electric Utility Industry	2,310,285	2,241,211	2,294,812	2,286,414	2,247,359	2,206,313	2,124,166
Industrials*	42,029e	49,072e	56,045e	60,369e	65,341	72,297	83,543
Industrials* — Received by Electric Utility Industry	15,649	12,004	8,401	7,576	6,034	6,670	4,032
Total Generation	**2,367,963**	**2,302,287**	**2,359,258**	**2,354,359**	**2,318,734**	**2,285,280**	**2,211,741**
Imports from Canada and Mexico	38,668	34,284	35,416	25,021	22,516	21,514	20,159
Total Kilowatthours	**2,406,631**	**2,336,571**	**2,394,674**	**2,379,380**	**2,341,250**	**2,306,794**	**2,231,900**
DISPOSITION							
Total Sales to Ultimate Customers	2,159,787	2,099,741	2,150,674	2,126,094	2,084,400	2,017,818	1,950,791
Exports to Canada and Mexico	3,337	3,540	1,832	4,096	2,182	2,186	2,744
Energy Used by Producer	2,633	2,539	1,462	2,540	3,382	2,372	2,462
Company Use & Free Service	10,650	12,051	10,068	9,053	11,086	7,975	7,037
Lost and Unaccounted For	188,195	169,628	174,593	177,228	174,859	204,146	185,323
Industrials*	42,029e	49,072e	56,045e	60,369e	65,341	72,297	83,543
Total Kilowatthours	**2,406,631**	**2,336,571**	**2,394,674**	**2,379,380**	**2,341,250**	**2,306,794**	**2,231,900**

	1976	1975	1974	1973	1972	1971	1970
SOURCE							
Generation							
Total Electric Utility Industry	2,037,674	1,917,619	1,866,436	1,856,216	1,749,637	1,612,589	1,531,609
Industrials*	82,406	79,340	94,955	95,761	98,241	96,495	102,440
Industrials* — Received by Electric Utility Industry	4,678	6,022	6,617	6,768	6,267	6,744	5,722
Total Generation	**2,124,758**	**2,002,981**	**1,968,008**	**1,958,745**	**1,854,145**	**1,715,828**	**1,639,771**
Imports from Canada and Mexico	10,989	11,268	15,420	16,848	10,496	7,043	6,169
Total Kilowatthours	**2,135,747**	**2,014,249**	**1,983,428**	**1,975,593**	**1,864,641**	**1,722,871**	**1,645,940**
DISPOSITION							
Total Sales to Ultimate Customers	1,849,625	1,733,024	1,700,769	1,703,203	1,577,714	1,466,441	1,391,359
Exports to Canada and Mexico	2,378	5,083	2,726	2,570	2,752	3,514	4,209
Energy Used by Producer	2,559	3,068	3,059	3,137	3,081	2,854	2,301
Company Use & Free Service	5,717	4,709	4,850	4,912	4,412	3,894	3,984
Lost and Unaccounted For	193,062	189,025	177,069	166,010	178,441	149,673	141,647
Industrials*	82,406	79,340	94,955	95,761	98,241	96,495	102,440
Total Kilowatthours	**2,135,747**	**2,014,249**	**1,983,428**	**1,975,593**	**1,864,641**	**1,722,871**	**1,645,940**

N/A Not Available.
**Includes non-electric utility industry facilities.*
p Preliminary. r Revised. e Estimated.
Sources: U.S. Department of Energy, Energy Information Administration, Monthly Power Plant Report *(EIA-759), Economic Regulatory Administration,* Electricity Transactions Across International Borders, *and Edison Electric Institute.*

TABLE 10

WORLD POWER DATA

FIFTEEN COUNTRIES WITH GREATEST INSTALLED GENERATING CAPACITY
1989

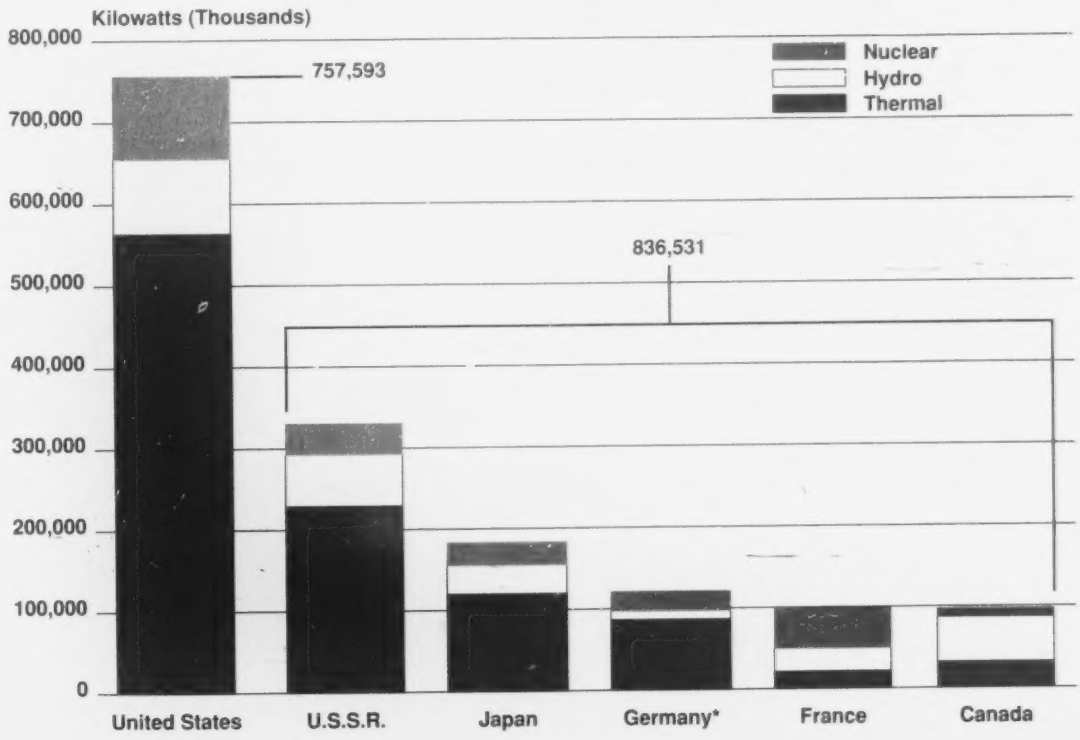
Country	Installed Capacity (Kilowatts in Thousands)				Energy Production† (kWh in Millions)				Population (Thousands)	kWh Per Capita
	Hydro	Nuclear	Thermal	Total	Hydro	Nuclear	Thermal	Total		
United States	88,746	103,397	565,450	757,593	272,021	529,355	2,179,399	2,980,775	247,350‡	12,051
U.S.S.R.	63,500	35,400	231,600	330,500	222,800	213,000	1,286,200	1,722,000	290,939	5,919
Japan	37,409	29,445	118,279	185,133	97,825	182,869	519,074	799,768	123,778	6,461
Germany*	8,705	24,628	88,535	121,868	18,567	161,287	376,123	555,977	77,555	7,169
France	24,815	52,530	22,795	100,140	51,160	303,931	51,800	406,891	56,213	7,238
Canada	57,924	11,890	29,076	98,890	291,447	79,871	128,218	499,536	26,527	18,831
China (mainland)	30,000	—	68,000	98,000	109,500	—	472,500	582,000	1,130,065	515
United Kingdom	4,163	7,665	58,051	69,879	6,970	64,600	240,558	312,128	60,678	5,144
India	18,504	1,565	49,804	69,873	63,760	7,349	189,546	260,655	850,067	307
Italy	18,237	1,120	38,091	57,448	34,184	0	173,266	207,450	57,680	3,597
Brazil	44,622	657	6,792	52,071	214,238	1,830	13,751	229,819	153,771	1,495
Spain	16,223	7,469	20,099	43,791	19,530	56,124	70,936	146,590	39,623	3,700
Australia	7,268	—	29,514	36,782	14,498	—	133,427	147,925	16,646	8,887
Sweden	15,616	9,850	7,317	32,783	72,102	65,885	5,923	143,910	8,407	17,118
Poland	1,976	—	28,774	30,750	3,757	—	141,710	145,467	38,363	3,792

† *Data presented on a gross generation basis.*
‡ *U.S. population July 1, 1989, excludes armed forces abroad. Dept. of Commerce, Bureau of Census.*
* *Data represents Unified Germany.*
Sources: Capacity and production: UN 1989 Energy Statistics Yearbook; *population (except as noted):* The World Almanac and Book of Facts – 1991.

CHART II-B

WORLD GENERATING CAPACITY

SIX LARGEST COUNTRIES — 1989



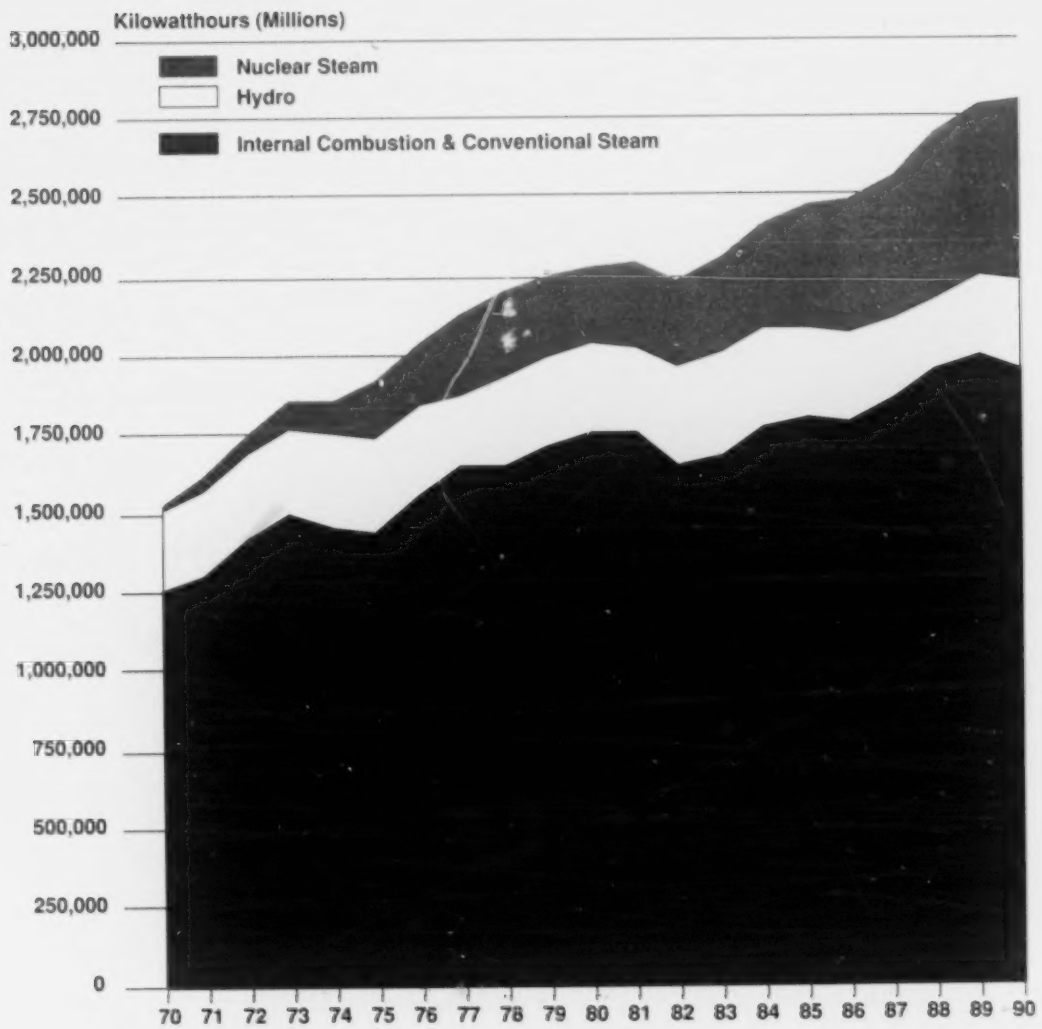
* *Data represents Unified Germany.*
Based on Table 10, as shown above.
Source: UN 1989 Energy Statistics Yearbook.

SECTION III
GENERATION

CHART III-A

GENERATION BY TYPE OF PRIME MOVER

TOTAL ELECTRIC UTILITY INDUSTRY

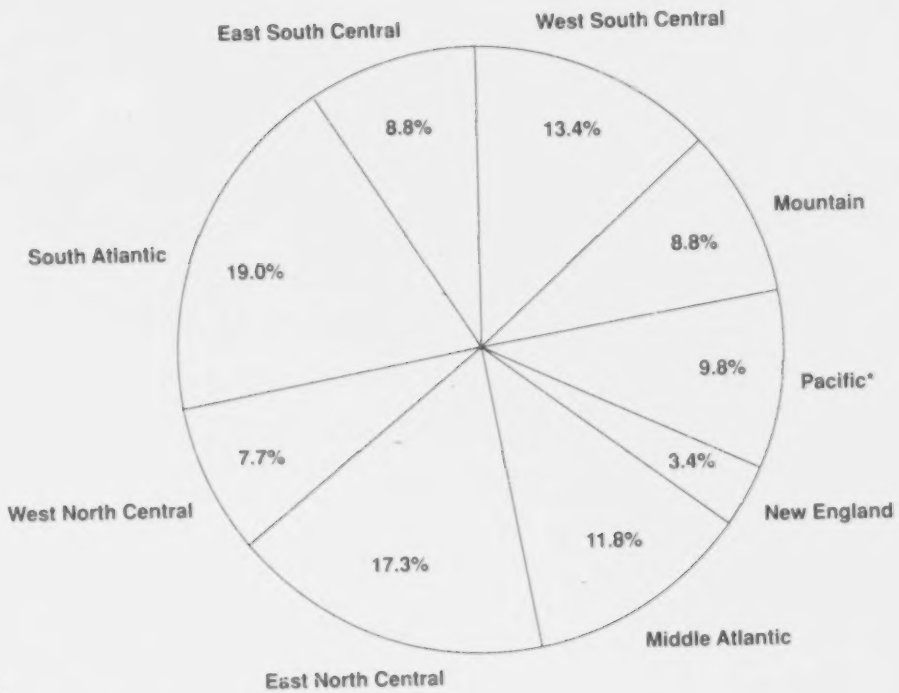


Based on table 12, page 19.
Source: U.S. Department of Energy, Energy Information Administration, Monthly Power Plant Report *(EIA-759).*

CHART III-B

GENERATION BY CENSUS DIVISIONS

TOTAL ELECTRIC UTILITY INDUSTRY
1990



* Includes Alaska and Hawaii
Based on table 15, page 23
Source: U.S. Department of Energy, Energy Information Administration, Monthly Power Plant Report, *(EIA-759).*

TABLE 12

GENERATION
TOTAL ELECTRIC UTILITY INDUSTRY

BY OWNERSHIP AND TYPE OF PRIME MOVER DRIVING THE GENERATOR
KILOWATTHOURS IN MILLIONS

Year	Total Electric Utility Industry	Investor-Owned Utilities	Cooperatives	Subtotal Government	Municipal Utilities	Federal	Power Districts, State Projects
TOTAL (Generation by All Types of Prime Mover)							
1990p	**2,807,058**	**2,201,007**	**126,115**	**479,936**	**97,670**	**235,272**	**146,994**
1989r	2,784,304	2,191,941	122,810	469,554	100,311	223,531	145,712
1988	2,704,250	2,145,601	123,079	435,571	96,539	201,125	137,907
1987	2,572,127	2,022,260	122,508	427,359	86,211	205,363	135,786
1986	2,487,310	1,928,199	113,897	445,214	78,869	224,854	141,491
1985	2,469,841	1,918,032	108,321	443,488	73,864	233,063	136,560
1984	2,416,304	1,848,916	101,970	465,418	74,672	253,928	136,818
1983	2,310,285	1,764,080	84,710	461,495	73,069	258,181	130,245
1982	2,241,211	1,711,576	77,098	452,537	76,569	241,004	134,964
1981	2,294,812	1,785,500	73,314	435,998	80,701	232,222	123,075
1980	2,286,414	1,782,933	63,550	439,931	86,579	235,051	118,301
1979	2,247,359	1,756,170	54,404	436,785	87,265	235,570	113,950
1978	2,206,313	1,721,163	48,717	436,433	89,700	235,257	111,476
1977	2,124,166	1,684,084	44,884	395,198	83,382	213,633	98,183
1976	2,037,674	1,582,029	41,223	414,422	78,176	236,024	100,222
1975	1,917,619	1,486,844	35,328	395,447	81,518	221,226	92,703
1974	1,866,436	1,442,114	33,844	390,478	78,677	219,821	91,980
1973	1,856,216	1,448,860	35,127	372,229	80,872	211,715	79,642
1972	1,749,637	1,358,929	31,714	358,994	78,931	206,668	73,395
1971	1,612,589	1,248,596	27,227	336,766	72,609	194,462	69,695
1970	1,531,609	1,183,190	23,459	324,960	71,394	185,753	67,813
HYDRO (Generation of Generators Driven by Water Wheels and Turbines)							
1990p	**279,839**	**66,571**	**588**	**212,680**	**15,887**	**140,379**	**56,414**
1989r	265,063	66,575	600	197,888	14,810	131,027	52,051
1988	222,940	48,725	396	173,819	12,644	112,015	49,160
1987	249,695	58,253	398	191,044	12,285	124,680	54,079
1986	290,844	71,356	396	219,091	16,841	141,990	60,260
1985	281,149	66,334	410	214,406	14,496	142,435	57,475
1984	321,150	83,639	279	237,232	15,775	162,268	59,190
1983	332,130	88,663	303	243,164	17,266	160,989	64,910
1982	309,213	81,527	294	227,392	17,061	148,027	62,305
1981	260,684	61,680	231	198,773	13,700	128,690	56,383
1980	276,039	70,500	267	205,272	15,603	131,909	57,760
1979	279,790	74,105	244	205,441	13,270	137,212	54,959
1978	280,432	72,381	275	207,776	14,889	136,804	56,083
1977	220,446	55,343	220	164,883	8,572	111,951	44,360
1976	283,734	68,034	221	215,479	14,444	144,218	56,817
1975	300,065	81,524	251	218,290	16,619	142,943	58,728
1974	300,928	81,204	197	219,527	17,218	137,882	64,427
1973	271,634	77,451	229	193,954	13,439	123,148	57,367
1972	272,626	76,820	220	195,586	15,152	126,328	54,106
1971	266,314	76,521	243	189,550	14,765	121,573	53,212
1970	247,456	70,587	214	176,655	14,453	110,695	51,507
CONVENTIONAL STEAM (Generation of Generators Driven by Steam Engines and Turbines)							
1990p	**1,948,566**	**1,593,527**	**125,366**	**229,674**	**80,984**	**80,998**	**67,692**
1989r	1,988,003	1,637,433	122,055	228,515	83,162	77,012	68,341
1988	1,952,566	1,599,747	122,552	230,267	80,152	85,266	64,848
1987	1,865,463	1,531,106	121,845	212,512	73,082	80,890	58,540
1986	1,780,853	1,469,751	113,219	197,883	61,198	83,092	53,593
1985	1,803,323	1,503,349	107,438	192,536	56,543	77,976	58,017
1984	1,765,608	1,487,840	101,184	176,584	54,008	66,989	55,587
1983	1,682,268	1,426,449	84,015	171,804	51,503	69,237	51,063
1982	1,646,883	1,396,336	76,481	174,066	54,507	65,682	53,878
1981	1,758,660	1,492,062	72,619	193,980	62,421	80,715	50,844
1980	1,755,634	1,499,918	62,803	192,913	63,899	83,715	45,299
1979	1,708,256	1,472,652	53,609	181,995	65,100	77,948	38,947
1978	1,644,756	1,415,266	47,887	181,603	66,212	81,535	33,856
1977	1,648,105	1,422,684	44,193	181,228	65,402	83,202	32,624
1976	1,557,647	1,346,179	38,409	173,059	57,547	87,584	27,928
1975	1,439,374	1,249,623	33,647	156,104	57,958	75,549	22,597
1974	1,445,808	1,261,009	32,887	151,912	56,605	75,640	19,667
1973	1,494,901	1,292,888	34,108	167,905	62,422	88,240	17,243
1972	1,416,218	1,229,998	30,713	155,507	58,814	80,324	16,369
1971	1,301,960	1,135,674	26,245	140,041	53,246	72,866	13,929
1970	1,256,294	1,092,564	22,610	141,120	52,380	75,048	13,692

See page 21 for footnotes.

TABLE 12 (continued)

GENERATION
TOTAL ELECTRIC UTILITY INDUSTRY

BY OWNERSHIP AND TYPE OF PRIME MOVER DRIVING THE GENERATOR
KILOWATTHOURS IN MILLIONS

Year	Total Electric Utility Industry	Investor-Owned Utilities	Cooperatives	Subtotal Government	Municipal Utilities	Federal	Power Districts, State Projects
NUCLEAR STEAM (Generation of Generators Driven by Nuclear Reactors)							
1990p	**576,862**	**540,098**	**—**	**36,764**	**(18)**	**13,895**	**22,887**
1989r	529,355	487,114	—	42,240	1,429	15,492	25,319
1988	526,973	496,367	—	30,606	2,864	3,844	23,897
1987	455,270	432,239	129	22,902	(57)	(207)	23,166
1986	414,038	386,513	157	27,367	(41)	(230)	27,638
1985	383,691	347,769	323	35,599	1,885	12,646	21,069
1984	327,634	276,849	319	50,466	3,760	24,665	22,040
1983	293,677	248,379	201	45,097	2,875	27,951	14,271
1982	282,773	233,213	137	49,423	3,349	27,294	18,780
1981	272,674	231,190	241	41,243	2,585	22,810	15,847
1980	251,121	211,831	214	39,076	4,426	19,413	15,237
1979	255,155	208,788	201	46,166	5,729	20,402	20,035
1978	276,403	232,742	174	43,487	5,046	16,911	21,530
1977	250,882	205,257	89	45,536	5,865	18,473	21,198
1976	191,107	167,098	2,157	21,852	2,161	4,214	15,477
1975	172,506	154,985	951	16,570	2,470	2,722	11,378
1974	113,727	99,042	313	14,372	198	6,289	7,885
1973	83,334	77,790	199	5,345	—	314	5,031
1972	54,092	50,933	240	2,919	—	—	2,919
1971	38,106	35,357	196	2,553	—	—	2,553
1970	21,797	19,063	120	2,614	—	—	2,614
INTERNAL COMBUSTION (Generation of Generators Driven by Internal Combustion Engines)							
1990p	**1,788**	**811**	**162**	**816**	**815**	**—**	**1**
1989r	1,880	817	155	908	907	—	1
1988	1,762	753	130	878	877	—	1
1987	1,685	649	136	900	899	—	1
1986	1,556	565	124	867	866	—	*
1985	1,662	570	150	942	938	4	*
1984	1,901	579	188	1,133	1,130	3	*
1983	2,207	588	190	1,429	1,425	3	1
1982	2,343	501	186	1,656	1,653	2	1
1981	2,795	568	224	2,003	1,995	7	1
1980	3,620	684	266	2,670	2,651	14	5
1979	4,158	625	350	3,183	3,166	8	9
1978	4,722	774	381	3,567	3,553	7	7
1977	4,733	800	382	3,551	3,543	7	1
1976	5,186	718	436	4,032	4,024	8	—
1975	5,674	712	479	4,483	4,471	12	—
1974	5,973	859	447	4,667	4,656	10	1
1973	6,347	731	591	5,025	5,011	13	1
1972	6,701	1,178	541	4,982	4,965	16	1
1971	6,209	1,044	543	4,622	4,598	23	1
1970	6,062	976	515	4,571	4,561	10	—
WIND† (Generation of Generators Driven by Wind Turbines)							
1990p	*	*	—	*	—	*	—
1989r	*	*	—	*	—	*	—
1988	1	1	—	(*)	—	(*)	—
1987	4	4	—	(*)	—	(*)	—
1986	4	3	—	1	—	1	—
1985	6	3	—	3	—	3	—
1984	7	4	—	3	—	3	—
SOLAR‡ (Generation of Generators Driven by Photovoltaic and Solar Thermal Energy)							
1990p	**2**	*	**—**	**2**	**2**	**—**	**—**
1989r	3	*	—	2	2	—	—
1988	9	8	—	1	1	—	—
1987	11	8	—	2	2	—	—
1986	14	10	—	4	4	—	—
1985	11	9	—	2	2	—	—
1984	5	5	—	*	*	—	—

Note: Total may not equal sum of components due to independent rounding.
† Prior to 1983 generation by wind not available.
‡ Prior to 1984 generation by solar not available.
p Preliminary. r Revised.
( ) Denotes negative value.
**Less than five hundred thousand kilowatthours.*
Source: U.S. Department of Energy, Energy Information Administration, Monthly Power Plant Report *(EIA-759).*

TABLE 13

GENERATION PER KILOWATT OF INSTALLED NAMEPLATE CAPACITY TOTAL ELECTRIC UTILITY INDUSTRY

BY OWNERSHIP AND TYPE OF PRIME MOVER DRIVING THE GENERATOR
KILOWATTHOURS

Year	Total Electric Utility Industry	Investor-Owned	Cooperatives	Government-Owned	Total Electric Utility Industry	Investor-Owned	Cooperatives	Government-Owned
	TOTAL				HYDRO			
1990p	**3,830**	**3,897**	**4,787**	**3,382**	**3,197**	**2,244**	**3,479**	**3,686**
1989r	3,773	3,873	4,662	3,208	2,798	1,943	2,947	3,240
1988	3,751	3,864	4,667	3,127	2,580	1,656	2,809	3,058
1987	3,608	3,687	4,641	3,097	2,919	2,005	3,476	3,389
1986	3,562	3,589	4,466	3,288	3,459	2,525	3,600	3,932
1985	3,629	3,670	4,393	3,327	3,437	2,471	4,432	3,908
1984	3,632	3,624	4,345	3,535	4,025	3,273	3,444	4,381
1983	3,532	3,512	3,880	3,550	4,228	3,578	3,741	4,529
1982	3,489	3,458	3,868	3,547	3,983	3,334	3,973	4,281
1981	3,676	3,690	4,335	3,533	3,396	2,541	3,448	3,792
1980	3,773	3,789	4,344	3,641	3,639	2,929	3,985	3,968
1979	3,816	3,827	4,272	3,725	3,823	3,103	3,642	4,173
1978	3,872	3,859	4,326	3,877	4,013	3,080	4,104	4,486
1977	3,892	3,945	4,308	3,646	3,230	2,391	3,284	3,660
1976	3,920	3,884	4,320	4,024	4,244	2,942	3,299	4,935
1975	3,895	3,836	4,254	4,102	4,634	3,556	4,149	5,226
1974	4,075	3,991	4,585	4,371	4,802	3,649	3,582	5,439
1973	4,427	4,385	5,021	4,545	4,597	3,788	4,164	5,027
1972	4,557	4,510	5,210	4,693	4,855	4,022	4,074	5,287
1971	4,541	4,532	5,122	4,534	4,800	4,035	4,418	5,198
1970	4,681	4,707	4,949	4,570	4,591	3,785	3,821	5,018
	STEAM				INTERNAL COMBUSTION			
1990p	**3,961**	**4,020**	**4,843**	**3,293**	**227**	**189**	**561**	**246**
1989r	3,947	4,007	4,721	3,306	251	215	485	271
1988	3,949	4,009	4,726	3,298	267	255	438	261
1987	3,736	3,798	4,695	3,008	277	265	456	270
1986	3,606	3,661	4,520	2,946	284	290	398	270
1985	3,683	3,744	4,446	3,032	338	410	460	294
1984	3,605	3,652	4,399	3,055	386	414	593	354
1983	3,463	3,519	3,928	2,966	436	377	608	448
1982	3,449	3,477	3,924	3,139	437	285	554	506
1981	3,748	3,764	4,417	3,478	501	303	638	598
1980	3,825	3,849	4,433	3,528	655	372	764	800
1979	3,849	3,881	4,381	3,527	753	347	903	956
1978	3,885	3,916	4,446	3,578	872	457	992	1,069
1977	4,022	4,048	4,423	3,777	893	487	1,129	1,070
1976	3,906	3,956	4,437	3,478	1,000	454	1,313	1,233
1975	3,815	3,868	4,375	3,358	1,127	479	1,423	1,396
1974	3,995	4,029	4,756	3,629	1,206	592	1,294	1,478
1973	4,441	4,444	5,200	4,298	1,300	478	1,723	1,668
1972	4,551	4,563	5,440	4,318	1,434	778	1,577	1,769
1971	4,540	4,589	5,377	4,063	1,406	769	1,578	1,702
1970	4,751	4,803	5,234	4,321	1,417	751	1,510	1,733

p Preliminary. r Revised.

Sources: U.S. Department of Energy, Energy Information Administration, Monthly Power Plant Report *(EIA-759),* Annual Electric Generator Report *(EIA-860), and* Annual Electric Utility Report *(EIA-861), as shown in Tables 2 and 12.*

TABLE 14

GENERATION IN PERCENT OF TOTAL TOTAL ELECTRIC UTILITY INDUSTRY

BY OWNERSHIP AND TYPE OF PRIME MOVER DRIVING THE GENERATOR

Year	Investor-Owned	Cooperatives	Government-Owned	Total	Investor-Owned	Cooperatives	Government-Owned	Total	Investor-Owned	Cooperatives	Government-Owned
	TOTAL			HYDRO				CONVENTIONAL STEAM			
1990p	**78.4%**	**4.5%**	**17.1%**	**10.0%**	**2.4%**	***%**	**7.6%**	**69.4%**	**56.8%**	**4.5%**	**8.2%**
1989r	78.7	4.4	16.9	9.5	2.4	*	7.1	71.4	58.8	4.4	8.2
1988	79.3	4.6	16.1	8.2	1.8	*	6.4	72.2	59.2	4.5	8.5
1987	78.6	4.8	16.6	9.7	2.3	*	7.4	72.5	59.5	4.7	8.3
1986	77.5	4.6	17.9	11.7	2.9	*	8.8	71.6	59.1	4.5	8.0
1985	77.7	4.4	17.9	11.4	2.7	*	8.7	73.0	60.9	4.3	7.8
1984	76.5	4.2	19.3	13.3	3.5	*	9.8	73.1	61.6	4.2	7.3
1983	76.4	3.6	20.0	14.4	3.9	*	10.5	72.8	61.7	3.6	7.5
1982	76.4	3.4	20.2	13.8	3.7	*	10.1	73.5	62.3	3.4	7.8
1981	77.8	3.2	19.0	11.4	2.7	*	8.7	76.6	65.0	3.2	8.4
1980	78.0	2.8	19.2	12.1	3.1	*	9.0	76.8	65.6	2.8	8.4
1979	78.1	2.4	19.5	12.4	3.3	*	9.1	76.0	65.5	2.4	8.1
1978	78.0	2.2	19.8	12.7	3.3	*	9.4	74.6	64.2	2.2	8.2
1977	79.3	2.1	18.6	10.4	2.6	*	7.8	77.6	67.0	2.1	8.5
1976	77.7	2.0	20.3	13.9	3.3	*	10.6	76.4	66.1	1.9	8.4
1975	77.5	1.9	20.6	15.6	4.2	*	11.4	75.1	65.2	1.8	8.1
1974	77.3	1.8	20.9	16.1	4.4	*	11.7	77.5	67.6	1.8	8.1
1973	78.1	1.9	20.0	14.6	4.2	*	10.4	80.6	69.7	1.9	9.0
1972	77.7	1.8	20.5	15.6	4.4	*	11.2	80.9	70.3	1.8	8.8
1971	77.4	1.7	20.9	16.5	4.7	*	11.8	80.7	70.4	1.7	8.6
1970	77.3	1.5	21.2	16.2	4.7	*	11.5	82.0	71.3	1.5	9.2
				NUCLEAR STEAM				INTERNAL COMBUSTION			
1990p				**20.6%**	**19.2%**	**—%**	**1.3%**	**0.1%**	***%**	***%**	***%**
1989r				19.0	17.5	—	1.5	0.1	*	*	*
1988				19.5	18.4	—	1.1	0.1	*	*	*
1987				17.7	16.8	*	0.9	0.1	*	*	*
1986				16.6	15.5	*	1.1	0.1	*	*	*
1985				15.5	14.1	*	1.4	0.1	*	*	*
1984				13.5	11.4	*	2.1	0.1	*	*	0.1
1983				12.7	10.8	*	1.9	0.1	*	*	0.1
1982				12.6	10.4	*	2.2	0.1	*	*	0.1
1981				11.9	10.1	*	1.8	0.1	*	*	0.1
1980				11.0	9.3	*	1.7	0.1	*	*	0.1
1979				11.4	9.3	*	2.1	0.2	*	*	0.2
1978				12.5	10.5	*	2.0	0.2	*	*	0.2
1977				11.8	9.7	*	2.1	0.2	*	*	0.2
1976				9.4	8.2	0.1	1.1	0.3	0.1	*	0.2
1975				9.0	8.0	0.1	0.9	0.3	0.1	*	0.2
1974				6.1	5.3	*	0.8	0.3	*	*	0.3
1973				4.5	4.2	*	0.3	0.3	*	*	0.3
1972				3.1	2.9	*	0.2	0.4	0.1	*	0.3
1971				2.4	2.2	*	0.2	0.4	0.1	*	0.3
1970				1.4	1.2	*	0.2	0.4	0.1	*	0.3

Note: Total may not equal sum of components due to independent rounding.
p Preliminary. r Revised.
**Less than one tenth of one percent.*
Source: U.S. Department of Energy, Energy Information Administration, Monthly Power Plant Report *(EIA-759), as shown in Table 12.*

TABLE 15

GENERATION
TOTAL ELECTRIC UTILITY INDUSTRY

BY STATE AND TYPE OF PRIME MOVER DRIVING THE GENERATOR
1989r and 1990p — KILOWATTHOURS IN MILLIONS

State/Division	Total Electric Utility Industry† 1990p	Total Electric Utility Industry† 1989r	Hydro 1990p	Hydro 1989r	Conventional Steam 1990p	Conventional Steam 1989r	Nuclear Steam 1990p	Nuclear Steam 1989r	Internal Combustion 1990p	Internal Combustion 1989r
Total United States	**2,807,058**	**2,784,304**	**279,839**	**265,063**	**1,948,566**	**1,988,003**	**576,862**	**529,355**	**1,788**	**1,880**
Maine	9,064	11,624	2,110	1,681	2,090	2,993	4,861	6,942	2	8
New Hampshire	10,810	7,125	1,477	1,089	5,252	6,037	4,081	—	—	—
Vermont	4,993	4,761	1,214	948	162	203	3,616	3,607	*	4
Massachusetts	36,479	39,158	300	226	30,993	35,750	5,070	3,015	117	166
Rhode Island	592	496	—	—	583	478	—	—	9	18
Connecticut	32,156	34,277	502	390	11,876	14,321	19,776	19,563	1	3
New England	**94,092**	**97,441**	**5,603**	**4,334**	**50,956**	**59,782**	**37,404**	**33,126**	**130**	**199**
New York	128,655	130,454	25,748	23,918	79,232	83,618	23,623	22,847	52	70
New Jersey	36,499	41,144	(150)	(261)	12,878	18,373	23,770	23,032	*	1
Pennsylvania	165,683	154,790	1,703	1,290	106,186	114,327	57,787	39,166	7	8
Middle Atlantic	**330,837**	**326,389**	**27,301**	**24,947**	**198,295**	**216,318**	**105,181**	**85,045**	**60**	**79**
Ohio	126,510	131,432	173	130	115,668	118,634	10,664	12,661	5	7
Indiana	97,738	88,563	441	450	97,290	88,105	—	—	8	8
Illinois	126,977	126,841	61	50	54,994	51,931	71,887	74,820	35	41
Michigan	89,059	91,518	798	749	66,597	69,382	21,611	21,312	54	75
Wisconsin	45,551	44,361	1,791	1,319	32,529	32,189	11,226	10,848	5	6
East North Central	**485,835**	**482,715**	**3,263**	**2,698**	**367,077**	**360,239**	**115,388**	**119,641**	**107**	**137**
Minnesota	39,966	40,377	658	654	27,160	28,792	12,139	10,926	9	5
Iowa	29,048	28,080	857	672	25,170	24,264	3,012	3,139	10	4
Missouri	59,011	59,382	2,156	1,094	48,837	49,923	7,998	8,344	20	21
North Dakota	26,824	25,705	1,711	1,893	25,113	23,812	—	—	—	—
South Dakota	6,427	6,985	3,934	4,583	2,492	2,402	—	—	1	*
Nebraska	21,631	21,089	1,140	1,158	12,956	11,834	7,511	8,077	24	19
Kansas	33,869	34,234	12	10	25,743	24,290	7,874	9,709	239	225
West North Central	**216,776**	**215,851**	**10,468**	**10,064**	**167,471**	**165,316**	**38,535**	**40,196**	**302**	**275**
Delaware	7,100	8,458	—	—	7,098	8,455	—	—	2	2
Maryland	31,497	35,759	2,299	1,778	27,901	31,185	1,251	2,719	47	77
District of Columbia	361	650	—	—	361	650	—	—	—	—
Virginia	47,187	43,360	428	401	22,935	28,687	23,820	14,264	4	8
West Virginia	77,364	82,860	435	476	76,929	82,384	—	—	—	—
North Carolina	79,805	87,103	6,916	6,996	46,983	50,895	25,905	29,212	—	—
South Carolina	69,260	66,984	2,729	2,016	23,650	24,189	42,881	40,780	*	*
Georgia	97,565	92,446	4,887	3,874	67,881	63,613	24,797	24,961	—	—
Florida	123,625	124,254	175	234	101,441	102,879	21,780	20,916	230	226
South Atlantic	**533,763**	**541,877**	**17,868**	**15,775**	**375,179**	**392,937**	**140,434**	**132,852**	**282**	**313**
Kentucky	73,807	70,760	3,160	4,404	70,647	66,356	—	—	*	—
Tennessee	73,856	73,959	9,491	11,853	50,363	46,503	14,003	15,603	—	—
Alabama	76,232	77,600	10,367	13,153	53,813	52,923	12,052	11,524	—	—
Mississippi	23,050	21,055	—	—	15,627	13,229	7,422	7,826	—	—
East South Central	**246,945**	**243,374**	**23,018**	**29,410**	**190,450**	**179,011**	**33,477**	**34,954**	*	—
Arkansas	37,053	33,400	3,698	3,084	22,074	21,471	11,282	8,844	*	*
Louisiana	58,188	54,292	—	—	43,991	41,898	14,197	12,391	*	3
Oklahoma	45,063	44,448	2,750	2,392	42,290	42,028	—	—	23	28
Texas	234,482	232,380	1,794	1,441	216,795	220,917	15,859	9,990	34	32
West South Central	**374,787**	**364,519**	**8,242**	**6,917**	**325,150**	**326,314**	**41,338**	**31,225**	**57**	**62**
Montana	25,719	25,823	10,672	9,550	15,046	16,273	—	—	*	*
Idaho	8,618	8,929	8,617	8,927	1	2	—	—	*	*
Wyoming	39,378	36,751	645	680	38,738	36,071	—	—	(5)	(*)
Colorado	31,313	32,299	1,276	1,705	30,036	30,063	—	529	1	2
New Mexico	28,491	28,349	205	232	28,285	28,116	—	—	1	*
Arizona	62,289	53,125	7,667	7,877	34,024	37,397	20,598	7,850	*	1
Utah	32,260	30,496	486	562	31,769	29,929	—	—	5	5
Nevada	19,286	19,681	1,732	1,859	17,555	17,823	—	—	(1)	(1)
Mountain	**247,355**	**235,452**	**31,300**	**31,392**	**195,454**	**195,674**	**20,598**	**8,380**	**2**	**8**
Washington	100,479	87,121	87,022	71,293	7,714	9,710	5,742	6,118	*	*
Oregon	49,172	44,964	40,962	37,815	2,137	1,849	6,074	5,299	—	—
California	114,528	132,264	23,795	29,524	58,015	70,196	32,693	32,519	24	23
Pacific	**264,179**	**264,349**	**151,778**	**138,633**	**67,866**	**81,755**	**44,509**	**43,936**	**24**	**23**
Alaska	4,493	4,388	975	873	3,273	3,253	—	—	246	262
Hawaii	7,996	7,949	23	22	7,395	7,405	—	—	579	522
Alaska & Hawaii	**12,489**	**12,336**	**997**	**895**	**10,667**	**10,658**	**—**	**—**	**825**	**783**

Note: Total may not equal sum of components due to independent rounding.
† Total includes generation by wind (1989r — 0.5kWh in millions; 1990p — 0.4kWh in millions) and generation by solar (1989r — 2.6kWh in millions; 1990p — 2.4kWh in millions).
*p Preliminary. r Revised. ( ) Denotes negative value. *Less than five hundred thousand kilowatthours.*
Source: U.S. Department of Energy, Energy Information Administration, Monthly Power Plant Report, (EIA-759).

TABLE 16

GENERATION
INVESTOR-OWNED ELECTRIC UTILITIES

BY STATE AND TYPE OF PRIME MOVER DRIVING THE GENERATOR
1989r and 1990p — KILOWATTHOURS IN MILLIONS

State/Division	Total Investor-Owned Utilities†		Hydro		Conventional Steam		Nuclear Steam		Internal Combustion	
	1990p	1989r	1990p	1989r	1990p	1989r	1990p	1989r	1990p	1989r
Total United States	**2,201,007**	**2,191,941**	**66,571**	**66,575**	**1,593,527**	**1,637,433**	**540,098**	**487,114**	**811**	**817**
Maine	9,062	11,622	2,108	1,678	2,090	2,993	4,861	6,942	2	9
New Hampshire	10,810	7,125	1,477	1,089	5,252	6,037	4,081	—	—	—
Vermont	4,747	4,507	1,129	887	1	10	3,616	3,607	*	3
Massachusetts	35,364	37,491	289	209	29,906	34,141	5,070	3,015	99	126
Rhode Island	592	496	—	—	583	478	—	—	9	18
Connecticut	32,139	34,258	488	377	11,875	14,317	19,776	19,563	*	1
New England	**92,714**	**95,500**	**5,492**	**4,240**	**49,707**	**57,976**	**37,404**	**33,126**	**111**	**157**
New York	94,172	96,493	4,495	3,884	75,683	80,880	13,990	11,723	5	6
New Jersey	36,429	40,957	(150)	(261)	12,808	18,186	23,770	23,032	*	1
Pennsylvania	165,585	154,690	1,605	1,190	106,186	114,327	57,787	39,166	7	8
Middle Atlantic	**296,187**	**292,141**	**5,950**	**4,813**	**194,677**	**213,392**	**95,547**	**73,921**	**12**	**15**
Ohio	125,293	130,152	173	130	114,454	117,355	10,664	12,661	2	6
Indiana	91,237	81,714	441	450	90,791	81,260	—	—	5	3
Illinois	123,860	123,982	61	50	51,911	49,112	71,887	74,820	1	1
Michigan	84,170	86,587	567	523	61,995	64,752	21,611	21,312	(2)	(1)
Wisconsin	41,279	40,094	1,580	1,151	28,473	28,094	11,226	10,848	*	1
East North Central	**465,839**	**452,529**	**2,821**	**2,304**	**347,624**	**340,574**	**115,388**	**119,641**	**6**	**10**
Minnesota	39,263	39,760	642	647	26,481	28,186	12,139	10,926	(*)	*
Iowa	27,197	26,242	848	665	23,338	22,438	3,012	3,139	(*)	(1)
Missouri	43,171	43,298	772	395	34,400	34,559	7,998	8,344	(*)	(*)
North Dakota	2,526	2,805	—	—	2,526	2,805	—	—	—	—
South Dakota	2,491	2,402	1	1	2,490	2,401	—	—	1	*
Nebraska	—	—	—	—	—	—	—	—	—	—
Kansas	29,432	29,745	12	10	21,545	20,025	7,874	9,709	*	*
West North Central	**144,079**	**144,251**	**2,275**	**1,717**	**110,781**	**110,415**	**31,023**	**32,119**	*	**(*)**
Delaware	6,778	7,999	—	—	6,778	7,999	—	—	—	—
Maryland	31,453	35,684	2,299	1,778	27,901	31,185	1,251	2,719	3	2
District of Columbia	361	650	—	—	361	650	—	—	—	—
Virginia	46,494	42,655	(265)	(301)	22,935	28,686	23,820	14,264	3	6
West Virginia	77,364	82,860	435	476	76,929	82,384	—	—	—	—
North Carolina	77,937	85,132	5,200	5,178	46,832	50,742	25,905	29,212	—	—
South Carolina	56,886	54,778	1,365	987	12,640	13,011	42,881	40,780	—	—
Georgia	94,742	90,407	2,063	1,834	67,882	63,612	24,797	24,961	—	—
Florida	93,528	95,884	*	*	71,748	74,967	21,780	20,916	*	1
South Atlantic	**485,543**	**496,049**	**11,098**	**9,952**	**334,005**	**353,236**	**140,434**	**132,852**	**6**	**9**
Kentucky	33,645	32,611	374	450	33,271	32,161	—	—	—	—
Tennessee	940	1,056	940	1,056	—	—	—	—	—	—
Alabama	55,675	54,479	4,902	6,105	38,614	36,739	12,159	11,636	—	—
Mississippi	20,588	18,547	—	—	13,166	10,721	7,422	7,826	—	—
East South Central	**110,847**	**106,694**	**6,215**	**7,611**	**85,051**	**79,621**	**19,581**	**19,462**	**—**	**—**
Arkansas	33,603	30,514	247	199	22,074	21,471	11,282	8,844	—	—
Louisiana	49,195	44,750	—	—	34,998	32,359	14,197	12,391	—	—
Oklahoma	33,029	32,146	—	—	33,029	32,146	—	—	*	*
Texas	201,068	198,727	404	52	184,805	188,685	15,859	9,990	(*)	(*)
West South Central	**316,894**	**306,137**	**651**	**251**	**274,905**	**274,661**	**41,338**	**31,225**	*	*
Montana	20,435	21,461	5,388	5,188	15,046	16,273	—	—	*	*
Idaho	5,280	5,833	5,279	5,831	1	2	—	—	*	*
Wyoming	28,142	26,670	2	2	28,145	26,668	—	—	(5)	(*)
Colorado	13,538	13,663	94	101	13,441	13,029	—	529	3	4
New Mexico	26,699	26,461	—	—	26,698	26,461	—	—	1	*
Arizona	31,091	20,088	34	33	10,460	12,204	20,598	7,850	*	1
Utah	16,843	15,473	89	125	16,754	15,349	—	—	—	—
Nevada	17,574	17,851	20	30	17,555	17,823	—	—	(1)	(1)
Mountain	**159,602**	**147,501**	**10,905**	**11,309**	**128,101**	**127,808**	**20,598**	**8,380**	**(2)**	**4**
Washington	12,316	13,755	4,601	4,044	7,714	9,710	—	—	*	*
Oregon	14,322	14,133	6,112	7,012	2,136	1,822	6,074	5,299	—	—
California	94,527	105,167	10,362	13,241	51,430	60,814	32,711	31,089	24	24
Pacific	**121,165**	**133,055**	**21,076**	**24,297**	**61,280**	**72,345**	**38,785**	**36,388**	**24**	**24**
Alaska	140	136	67	59	—	—	—	—	74	77
Hawaii	7,996	7,949	23	22	7,395	7,405	—	—	579	522
Alaska & Hawaii	**8,137**	**8,085**	**89**	**82**	**7,395**	**7,405**	**—**	**—**	**652**	**599**

Note: Total may not equal sum of components due to independent rounding.
† Total includes generation by wind (1989r — 0.4kWh in millions; 1990p — 0.4kWh in millions) and generation by solar (1989r — 0.4kWh in millions; 1990p — 0.1kWh in millions).
*p Preliminary. r Revised. ( ) Denotes negative value. * Less than five hundred thousand kilowatthours.*
Source: U.S. Department of Energy, Energy Information Administration, Monthly Power Plant Report *(EIA-759).*

TABLE 17

GENERATION
TOTAL ELECTRIC UTILITY INDUSTRY AND INVESTOR-OWNED ELECTRIC UTILITIES

BY MONTH AND TYPE OF PRIME MOVER DRIVING THE GENERATOR
1987–1990p — KILOWATTHOURS IN MILLIONS

	Total Electric Utility Industry					Investor-Owned Electric Utilities				
Year — Month	Total†	Hydro	Conventional Steam	Nuclear Steam	Internal Combustion	Total†	Hydro	Conventional Steam	Nuclear Steam	Internal Combustion
YEAR — 1990p										
January	237,339	23,412	158,685	55,119	122	186,256	6,056	129,498	50,638	63
February	212,708	24,151	138,486	49,963	108	166,098	6,536	113,584	45,919	58
March	225,854	28,042	151,615	46,087	111	176,200	7,590	124,974	43,578	58
April	211,088	25,387	147,061	38,516	124	163,639	6,425	120,293	36,850	71
May	222,908	27,001	152,833	42,945	129	173,329	6,687	125,587	40,990	65
June	248,935	27,621	174,803	46,332	178	192,400	5,512	143,306	43,511	70
July	266,228	23,658	188,711	53,645	214	208,996	4,591	154,362	49,967	77
August	268,483	21,048	191,462	55,758	214	212,776	4,095	156,746	51,858	77
September	237,869	16,971	172,231	48,485	182	189,989	3,666	140,791	45,468	64
October	224,794	18,605	162,650	43,395	144	179,058	5,058	132,901	41,037	63
November	213,596	19,993	148,432	45,034	137	167,853	4,931	120,568	42,281	73
December	237,257	23,952	161,599	51,582	124	184,413	5,423	130,917	48,001	71
Total	2,807,058	279,839	1,948,566	576,862	1,788	2,201,007	66,571	1,593,527	540,098	811
YEAR — 1989r										
January	232,747	20,930	165,353	46,328	136	182,785	4,401	135,850	42,466	69
February	219,826	18,620	162,344	38,725	137	174,635	4,078	134,126	36,367	64
March	226,742	22,642	164,310	39,636	154	180,680	6,743	137,304	36,561	73
April	208,042	24,077	150,336	33,495	134	162,525	7,215	124,438	30,814	58
May	220,124	28,049	153,588	38,339	148	169,561	6,937	127,003	35,564	57
June	235,689	25,882	166,659	42,976	171	184,291	6,578	137,480	40,163	70
July	257,050	22,671	181,847	52,331	200	202,160	5,849	148,262	47,976	73
August	258,687	20,187	183,360	54,948	192	204,867	4,612	149,499	50,684	73
September	227,150	18,919	163,239	44,837	154	179,966	4,265	134,544	41,095	62
October	219,910	20,076	156,142	43,558	134	173,862	5,093	129,301	39,402	67
November	219,300	21,186	154,586	43,399	129	172,165	5,492	126,927	39,676	70
December	259,038	21,823	186,240	50,784	192	204,442	5,312	152,700	46,347	83
Total	2,784,304	265,063	1,988,003	529,355	1,880	2,191,941	66,575	1,637,433	487,114	817
YEAR — 1988										
January	237,897	22,033	171,048	44,658	156	187,492	4,939	140,272	42,209	70
February	216,937	19,105	155,469	42,246	115	171,237	4,520	126,432	40,233	51
March	214,013	19,514	150,470	43,912	116	170,251	4,769	123,539	41,887	55
April	196,000	19,104	136,729	40,067	100	154,898	4,999	112,123	37,728	47
May	208,371	21,238	146,372	40,650	109	163,562	4,901	119,535	39,074	51
June	232,747	18,833	169,657	44,079	176	184,347	3,528	138,800	41,956	62
July	257,461	16,904	190,525	49,828	202	205,816	3,095	156,673	45,978	69
August	267,693	16,447	201,945	49,035	264	215,054	2,987	166,502	45,468	95
September	220,179	16,270	157,501	46,270	136	174,182	3,100	127,682	43,340	59
October	210,608	15,112	152,781	42,591	123	169,026	3,122	125,632	40,209	63
November	209,593	18,466	151,422	39,583	122	165,944	4,616	124,357	36,912	60
December	232,752	19,913	168,645	44,052	142	183,793	4,150	138,198	41,375	70
Total	2,704,250	222,940	1,952,566	526,973	1,762	2,145,601	48,725	1,599,747	496,367	753
YEAR — 1987										
January	222,749	25,412	157,231	39,975	132	172,804	5,880	129,174	37,697	53
February	194,034	21,226	136,096	36,598	114	152,083	5,326	111,793	34,914	49
March	201,849	23,248	141,189	37,290	122	159,397	6,749	116,975	35,623	50
April	189,496	22,025	133,834	33,518	117	148,877	6,052	110,428	32,345	51
May	206,074	24,202	147,420	34,320	130	160,451	5,114	121,837	33,441	57
June	225,589	20,863	167,992	36,560	171	178,067	4,151	138,477	35,383	53
July	247,915	20,195	187,443	40,056	219	196,760	4,089	154,111	38,492	66
August	247,645	18,446	187,637	41,352	208	196,592	3,378	153,824	39,326	63
September	213,008	18,180	155,034	39,666	128	168,363	4,101	126,811	37,399	52
October	203,009	17,955	148,452	36,492	110	158,978	3,905	121,388	33,636	49
November	200,258	16,857	145,850	37,438	112	157,596	4,141	118,703	34,701	51
December	220,500	21,087	157,285	42,006	123	172,292	5,368	127,585	39,285	55
Total	2,572,127	249,695	1,865,463	455,270	1,685	2,022,260	58,253	1,531,106	432,239	649

Note: Total may not equal sum of components due to independent rounding.
† Includes generation by wind and solar. See Table12 for details.
p Preliminary. r Revised.
Source: U.S. Department of Energy. Energy Information Administration. Monthly Power Plant Report *(EIA-759).*

TABLE 18

INDEX OF WEEKLY ELECTRIC OUTPUT TOTAL ELECTRIC UTILITY INDUSTRY

(EXCLUDING ALASKA AND HAWAII)
SEASONALLY ADJUSTED — 1967 AVERAGE = 100
1980 - 1990

Week Number	1990	1989	1988	1987	1986	1985	1984	1983	1982	1981	1980
1	238	239	224	208	212	199	201	169	176	180	179
2	225	229	234	204	210	202	192	174	179	189	178
3	215	219	232	202	199	207	204	176	205	197	170
4	220	217	216	213	194	219	195	188	193	185	176
5	223	221	228	219	215	209	190	182	190	182	194
6	224	252	221	200	196	213	190	177	183	191	190
7	224	233	235	208	220	206	177	186	192	192	188
8	240	247	233	223	210	200	187	183	182	176	185
9	243	242	228	221	216	201	206	184	193	187	200
10	237	247	221	212	213	206	207	185	196	193	204
11	230	232	222	217	206	202	205	186	194	192	196
12	235	238	237	218	213	207	202	189	192	198	195
13	246	229	228	209	203	204	195	201	195	195	196
14	243	240	224	223	201	204	203	195	195	189	191
15	244	240	225	216	208	204	203	196	201	193	188
16	241	234	225	211	210	205	202	200	193	195	195
17	243	238	227	216	213	215	206	191	192	195	188
18	246	238	222	219	214	211	206	191	187	198	187
19	237	229	225	219	216	213	208	191	187	193	187
20	243	230	229	221	215	216	205	190	189	192	185
21	238	244	227	226	208	208	208	190	192	188	182
22	231	242	219	227	214	212	199	187	187	192	185
23	240	229	238	228	217	222	214	188	191	198	193
24	241	224	236	220	218	212	220	198	187	204	180
25	243	233	252	235	213	203	215	193	182	205	179
26	245	232	228	230	217	206	209	194	179	200	192
27	252	239	224	223	213	201	205	190	179	194	192
28	236	238	265	226	219	214	212	200	190	202	197
29	233	222	233	211	212	198	192	201	182	195	202
30	235	238	235	232	217	196	194	199	190	194	194
31	235	238	252	230	215	194	192	202	187	185	194
32	226	217	249	232	203	197	206	199	189	192	204
33	243	227	253	223	205	211	214	207	186	198	201
34	246	238	235	234	214	202	206	215	190	186	196
35	263	244	222	212	196	200	207	205	184	188	194
36	259	235	218	209	194	215	196	211	196	197	201
37	264	245	222	222	207	218	213	204	177	187	200
38	245	234	234	229	210	203	199	195	196	193	198
39	241	227	228	219	230	207	206	189	182	189	203
40	247	234	222	222	236	205	197	197	184	195	192
41	258	239	225	216	215	208	202	194	192	194	186
42	248	243	228	215	210	212	206	198	184	194	188
43	245	235	231	216	207	209	207	197	186	194	189
44	242	237	231	218	207	206	208	197	185	193	194
45	246	237	229	215	213	209	205	199	186	188	187
46	239	234	225	218	221	208	206	201	184	188	188
47	231	236	221	221	222	214	204	191	191	192	201
48	240	243	233	212	207	209	208	205	179	187	190
49	242	245	227	213	213	215	212	199	174	184	184
50	237	257	241	212	219	211	199	195	179	189	185
51	232	267	220	220	213	221	191	212	189	196	192
52	252	255	223	215	209	215	190	229	186	198	199
Year	**240**	**237**	**218**	**211**	**208**	**202**	**195**	**184**	**192**	**191**	**189**

Note: Seasonal factors are always based on 52 weeks ending on Saturday. Therefore one week is eliminated in 1983 and 1988, since those years had 53 Saturdays.
The above values are based on EEI Weekly Electric Output Index — (Revised Methodology) dated January, 1958.

TABLE 19

WEEKLY ELECTRIC OUTPUT—TOTAL ELECTRIC UTILITY INDUSTRY

(EXCLUDING ALASKA AND HAWAII)

1988 - 1990 — KILOWATTHOURS IN MILLIONS

Week Ended	1990	Week Ended	1989	Percent Change 90/89	Week Ended	1988	Percent Change 89/88
					Jan. 2	50,925	
Jan. 6	54,163	Jan. 7	53,862	0.6	9	58,056	(7.2)
13	55,906	14	56,080	(0.3)	16	58,251	(3.7)
20	54,128	21	54,443	(0.6)	23	53,713	1.4
27	54,672	28	53,720	1.8	30	55,822	(3.8)
Feb. 3	54,451	Feb. 4	53,749	1.3	Feb. 6	53,718	0.1
10	53,802	11	60,378	(10.9)	13	56,388	7.1
17	53,780	18	55,247	(2.7)	20	52,837	4.6
24	54,457	25	55,761	(2.3)	27	52,159	6.9
Mar. 3	55,146	Mar. 4	54,857	0.5	Mar. 5	50,379	8.9
10	53,145	11	55,640	(4.5)	12	49,347	12.8
17	50,635	18	51,187	(1.1)	19	51,926	(1.4)
24	51,545	25	51,637	(0.2)	26	49,335	4.7
31	52,425						
		Apr. 1	49,132	6.7	Apr. 2	47,376	3.7
Apr. 7	50,748	8	50,692	0.1	9	46,803	8.3
14	50,927	15	50,653	0.5	16	47,706	6.2
21	50,178	22	49,205	2.0	23	47,678	3.2
28	51,670	29	50,603	2.1	30	48,109	5.2
May 5	52,403	May 6	50,803	3.1	May 7	47,371	7.2
12	51,158	13	49,583	3.2	14	48,507	2.2
19	53,188	20	50,362	5.6	21	50,076	0.6
26	53,286	27	54,702	(2.6)	28	49,940	9.5
June 2	51,762	June 3	54,123	(4.4)	June 4	50,944	6.2
9	57,265	10	54,446	5.2	11	52,418	3.9
16	59,115	17	54,477	8.5	18	56,520	(3.6)
23	62,244	24	58,148	7.0	25	61,424	(5.3)
30	62,538						
		July 1	58,699	6.5	July 2	56,452	4.0
July 7	62,258	8	57,848	7.6	9	57,593	0.4
14	63,317	15	62,240	1.7	16	62,889	(1.0)
21	62,558	22	59,161	5.7	23	62,180	(4.9)
28	63,003	29	63,206	(0.3)	30	61,461	2.8
Aug. 4	62,926	Aug. 5	62,586	0.5	Aug. 6	65,424	(4.3)
11	61,022	12	57,467	6.2	13	65,358	(12.1)
18	62,772	19	58,037	8.2	20	64,582	(10.1)
25	62,261	26	60,324	3.2	27	58,908	2.4
Sept. 1	65,279	Sept. 2	60,615	7.7	Sep. 3	55,555	9.1
8	61,653	9	56,357	9.4	10	50,614	11.3
15	61,180	16	56,630	8.0	17	53,523	5.8
22	55,464	23	53,091	4.5	24	53,072	0.0
29	53,028	30	49,976	6.1			
					Oct. 1	50,513	(1.1)
Oct. 6	53,282	Oct. 7	50,637	5.2	8	48,164	5.1
13	53,517	14	49,959	7.1	15	47,882	4.3
20	51,469	21	50,781	1.4	22	48,440	4.8
27	51,050	28	49,313	3.5	29	49,095	0.4
Nov. 3	50,897	Nov. 4	50,098	1.6	Nov. 5	49,455	1.3
10	52,102	11	50,513	3.1	12	49,552	1.9
17	52,078	18	51,419	1.3	19	50,173	2.5
24	49,855	25	51,471	(3.1)	26	49,001	5.0
Dec. 1	52,312	Dec. 2	53,394	(2.0)	Dec. 3	51,873	2.9
8	55,739	9	56,872	(2.0)	10	53,602	6.1
15	55,507	16	60,332	(8.0)	17	57,415	5.1
22	55,887	23	64,620	(13.5)	24	53,770	20.2
29	56,289	30	57,295	(1.8)	31	50,791	12.8

Note: "Weekly Electric Output" is the total of that reported by the individual utilities which consists of the net electric energy generated by each respondent utility plus energy received from others less energy delivered for resale.

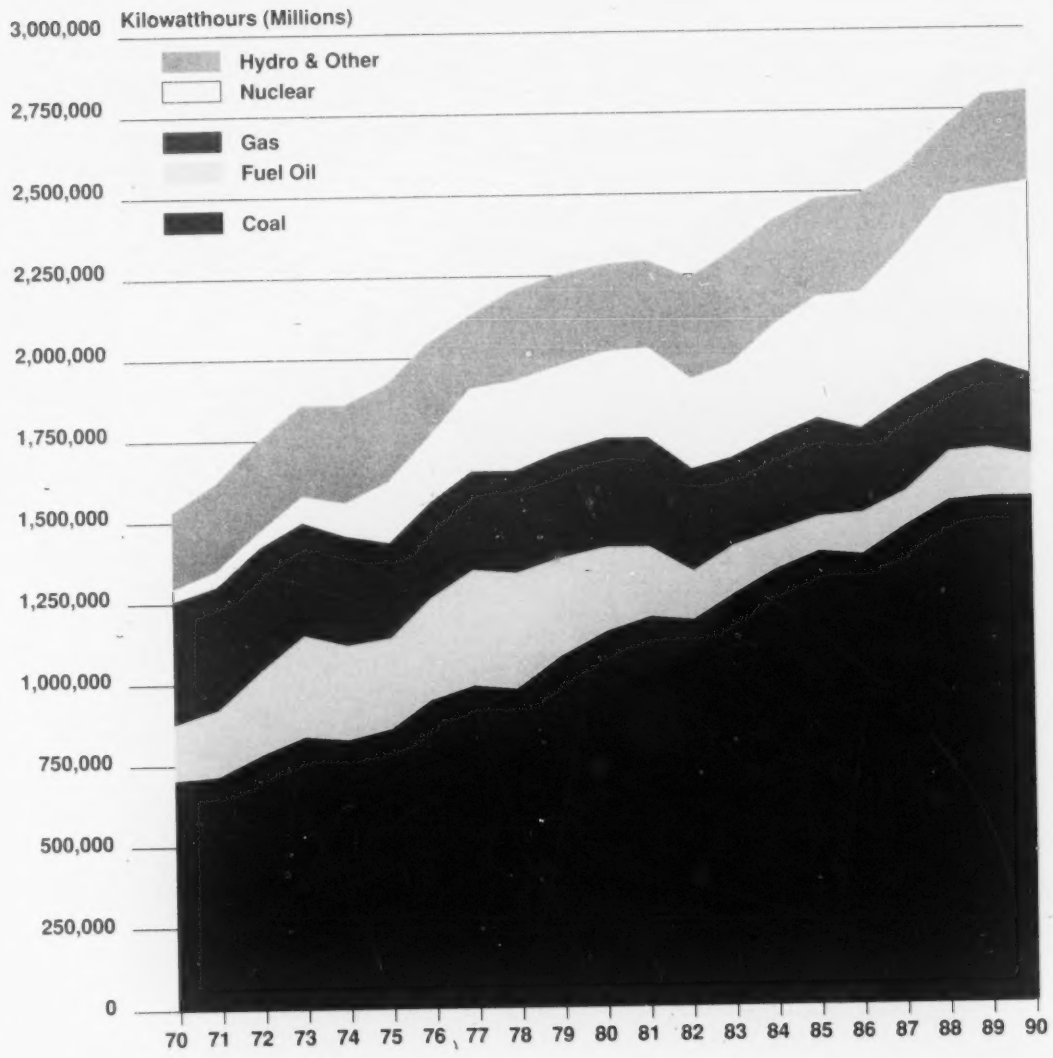
These figures are based on the reports of investor-owned utilities, large municipal systems, and state and Federal agencies comprising 92 percent of the total. They are then expanded to an estimated full coverage of the contiguous United States. As these data are for 52 weeks rather than for the calendar year and include net imports and purchases from industrial plants, they do no add to totals for the electric utility industry shown in other tables.

SECTION IV
FUEL

CHART IV-A

ELECTRIC POWER GENERATION

TOTAL ELECTRIC UTILITY INDUSTRY
BY SOURCE



Based on Table 21, page 29.
Source: U.S. Department of Energy. Energy Information Administration. Monthly Power Plant Report. *(EIA-759).*

TABLE 21

SOURCES OF ENERGY FOR ELECTRIC GENERATION TOTAL ELECTRIC UTILITY INDUSTRY*

BY YEAR AND ENERGY SOURCE
KILOWATTHOURS IN MILLIONS

Year	Total Generation	Coal	Fuel Oil	Gas	Nuclear	Hydro	Other**
1990p	**2,807,058**	**1,558,457**	**117,182**	**264,067**	**576,862**	**279,839**	**10,651**
1989r	2,784,304	1,553,661	158,318	266,598	529,355	265,063	11,309
1988	2,704,250	1,540,653	148,900	252,801	526,973	222,940	11,984
1987	2,572,127	1,463,781	118,493	272,621	455,270	249,695	12,267
1986	2,487,310	1,385,831	136,585	248,508	414,038	290,844	11,503
1985	2,469,841	1,402,128	100,202	291,946	383,691	281,149	10,724
1984	2,416,304	1,341,681	119,808	297,394	327,634	321,150	8,638
1983	2,310,285	1,259,424	144,499	274,098	293,677	332,130	6,456
1982	2,241,211	1,192,379	146,423	305,260	282,773	309,213	5,164
1981	2,294,812	1,203,554	206,070	345,777	272,674	260,684	6,054
1980	2,286,414	1,161,969	245,547	346,233	251,121	276,039	5,506
1979	2,247,359	1,075,595	302,948	329,486	255,155	279,790	4,387
1978	2,206,313	976,618	364,153	305,392	276,403	280,432	3,315
1977	2,124,166	985,465	357,866	305,444	250,882	220,446	4,063
1976	2,037,674	944,562	319,779	294,610	191,107	283,734	3,883
1975	1,917,619	852,972	288,873	299,766	172,506	300,065	3,437
1974	1,866,436	829,842	299,306	319,931	113,727	300,928	2,703
1973	1,856,216	845,704	312,805	340,449	83,334	271,634	2,290
1972	1,749,637	772,871	272,530	375,735	54,092	272,626	1,783
1971	1,612,589	714,676	218,608	374,026	38,106	266,314	859
1970	1,531,609	706,102	182,488	372,884	21,797	247,456	882

Note: Total may not equal sum of components due to independent rounding.
**Generation by petroleum coke included in fuel oil from 1970 to 1980, and 1983 to 1989. In 1981 and 1982 petroleum coke included in coal.*
***Includes generation by geothermal, wood, waste, wind and solar.*
p Preliminary. r Revised.
Source: U.S. Department of Energy, Energy Information Administration, Monthly Power Plant Report, *(EIA-759).*

TABLE 22

SOURCES OF ENERGY FOR ELECTRIC GENERATION IN PERCENT OF TOTAL TOTAL ELECTRIC UTILITY INDUSTRY

BY YEAR AND ENERGY SOURCE

Year	Coal	Fuel Oil	Gas	Nuclear	Hydro	Other
1990p	**55.5%**	**4.2%**	**9.4%**	**20.6%**	**10.0%**	**0.4%**
1989r	55.8	5.7	9.6	19.0	9.5	0.4
1988	57.0	5.5	9.3	19.5	8.2	0.4
1987	56.9	4.6	10.6	17.7	9.7	0.5
1986	55.7	5.5	10.0	16.6	11.7	0.5
1985	56.8	4.1	11.8	15.5	11.4	0.4
1984	55.5	5.0	12.3	13.6	13.3	0.4
1983	54.5	6.3	11.9	12.7	14.4	0.3
1982	53.2	6.5	13.6	12.6	13.8	0.2
1981	52.4	9.0	15.1	11.9	11.4	0.3
1980	50.8	10.7	15.1	11.0	12.1	0.2
1979	47.9	13.5	14.7	11.4	12.4	0.2
1978	44.3	16.5	13.8	12.5	12.7	0.2
1977	46.4	16.8	14.4	11.8	10.4	0.2
1976	46.4	15.7	14.5	9.4	13.9	0.2
1975	44.5	15.1	15.6	9.0	15.6	0.2
1974	44.5	16.0	17.1	6.1	16.1	0.1
1973	45.6	16.9	18.3	4.5	14.6	0.1
1972	44.2	15.6	21.5	3.1	15.6	0.1
1971	44.3	13.6	23.2	2.4	16.5	0.1
1970	46.1	11.9	24.3	1.4	16.2	0.1

Note: Total may not equal sum of components due to independent rounding.
p Preliminary. r Revised.
Source: U.S. Department of Energy, Energy Information Administration, Monthly Power Plant Report, *(EIA-759), as shown in Table 21.*

TABLE 23

SOURCES OF ENERGY FOR ELECTRIC GENERATION TOTAL ELECTRIC UTILITY INDUSTRY

BY STATE AND ENERGY SOURCE
YEAR 1990p — KILOWATTHOURS IN MILLIONS

State/Division	Total Generation	Coal†	Fuel Oil††	Gas	Nuclear Fuel	Hydro	Other**
Total United States	**2,807,058**	**1,558,457**	**117,182**	**264,067**	**576,862**	**279,839**	**10,651**
Maine	9,064	—	2,093	—	4,861	2,110	—
New Hampshire	10,810	2,959	2,293	—	4,081	1,477	—
Vermont	4,993	—	3	65	3,616	1,214	94
Massachusetts	36,479	11,273	14,556	5,280	5,070	300	—
Rhode Island	592	—	158	434	—	—	—
Connecticut	32,156	2,351	8,633	472	19,776	502	422
New England	**94,092**	**16,583**	**27,736**	**6,251**	**37,404**	**5,603**	**516**
New York	128,655	24,617	33,404	21,263	23,623	25,748	—
New Jersey	36,499	7,058	1,832	3,988	23,770	(150)	—
Pennsylvania	165,683	101,996	4,014	183	57,787	1,703	—
Middle Atlantic	**330,837**	**133,671**	**39,250**	**25,434**	**105,181**	**27,301**	**—**
Ohio	126,510	115,014	301	91	10,664	173	267
Indiana	97,738	96,013	674	611	—	441	—
Illinois	126,977	53,866	423	741	71,887	61	—
Michigan	89,059	65,296	689	665	21,611	798	—
Wisconsin	45,551	32,145	47	169	11,226	1,791	173
East North Central	**485,835**	**362,333**	**2,135**	**2,277**	**115,388**	**3,263**	**439**
Minnesota	39,966	26,004	441	326	12,139	658	398
Iowa	29,048	24,880	51	231	3,012	857	17
Missouri	59,011	48,502	89	266	7,998	2,156	—
North Dakota	26,824	25,093	21	(*)	—	1,711	—
South Dakota	6,427	2,473	8	12	—	3,934	—
Nebraska	21,631	12,658	13	308	7,511	1,140	—
Kansas	33,869	23,720	66	2,196	7,874	12	*
West North Central	**216,776**	**163,329**	**689**	**3,340**	**38,535**	**10,468**	**416**
Delaware	7,100	4,904	1,436	759	—	—	—
Maryland	31,497	23,299	3,328	1,320	1,251	2,299	—
District of Columbia	361	—	361	—	—	—	—
Virginia	47,187	21,000	1,194	745	23,820	428	*
West Virginia	77,364	76,636	274	19	—	435	—
North Carolina	79,805	46,631	187	165	25,905	6,916	—
South Carolina	69,260	22,875	72	703	42,881	2,729	—
Georgia	97,565	67,565	165	152	24,797	4,887	—
Florida	123,625	59,073	25,170	17,427	21,780	175	—
South Atlantic	**533,763**	**321,984**	**32,188**	**21,290**	**140,434**	**17,868**	**•**
Kentucky	73,807	70,500	119	28	—	3,160	—
Tennessee	73,856	50,187	134	41	14,003	9,491	—
Alabama	76,232	53,301	92	420	12,052	10,367	—
Mississippi	23,050	9,446	793	5,389	7,422	—	—
East South Central	**246,945**	**183,434**	**1,138**	**5,878**	**33,477**	**23,018**	**—**
Arkansas	37,053	19,161	74	2,839	11,282	3,698	—
Louisiana	58,188	17,800	130	26,061	14,197	—	—
Oklahoma	45,063	25,189	49	17,075	—	2,750	—
Texas	234,482	118,789	481	97,280	15,859	1,794	279
West South Central	**374,787**	**180,939**	**734**	**143,255**	**41,338**	**8,242**	**279**
Montana	25,719	14,903	27	41	—	10,672	75
Idaho	8,618	—	1	—	—	8,617	—
Wyoming	39,378	38,681	46	7	—	645	—
Colorado	31,313	29,603	25	409	—	1,276	*
New Mexico	28,491	25,827	34	2,425	—	205	—
Arizona	62,289	31,636	116	2,272	20,598	7,667	—
Utah	32,260	31,519	49	54	—	486	152
Nevada	19,286	15,053	284	2,217	—	1,732	—
Mountain	**247,355**	**187,222**	**583**	**7,424**	**20,598**	**31,300**	**227**
Washington	100,479	7,352	14	16	5,742	87,022	333
Oregon	49,172	1,298	27	811	6,074	40,962	1
California	114,528	—	4,385	45,222	32,693	23,795	8,434
Pacific	**264,179**	**8,649**	**4,426**	**46,049**	**44,509**	**151,778**	**8,767**
Alaska	4,493	312	337	2,870	—	975	—
Hawaii	7,996	—	7,967	—	—	23	6
Alaska & Hawaii	**12,489**	**312**	**8,304**	**2,870**	**—**	**997**	**6**

Note: Total may not equal sum of components due to independent rounding.
†Excludes petroleum coke.
††Includes petroleum coke.
**Less than five hundred thousand kilowatthours.*
***Includes generation by geothermal, wood, waste, wind and solar.*
p Preliminary. ( ) Denotes negative value.
Source: U.S. Department of Energy, Energy Information Administration, Monthly Power Plant Report *(EIA-759).*

TABLE 24

SOURCES OF ENERGY FOR ELECTRIC GENERATION TOTAL ELECTRIC UTILITY INDUSTRY

BY STATE AND ENERGY SOURCE
YEAR 1990p — PERCENT

State/Division	Total Generation	Coal†	Fuel Oil††	Gas	Nuclear Fuel	Hydro	Other**
Total United States	**100.0%**	**55.5%**	**4.2%**	**9.4%**	**20.6%**	**10.0%**	**0.4%**
Maine	100.0	—	23.1	—	53.6	23.3	—
New Hampshire	100.0	27.4	21.2	—	37.7	13.7	—
Vermont	100.0	—	0.1	1.3	72.4	24.3	1.9
Massachusetts	100.0	30.9	39.9	14.5	13.9	0.8	—
Rhode Island	100.0	—	26.7	73.3	—	—	—
Connecticut	100.0	7.3	26.8	1.5	61.5	1.6	1.3
New England	**100.0**	**17.6**	**29.5**	**6.6**	**39.8**	**6.0**	**0.5**
New York	100.0	19.1	26.0	16.5	18.4	20.0	—
New Jersey	100.0	19.3	5.0	10.9	65.1	(0.4)	—
Pennsylvania	100.0	61.6	2.4	0.1	34.9	1.0	—
Middle Atlantic	**100.0**	**40.4**	**11.9**	**7.7**	**31.8**	**8.3**	**—**
Ohio	100.0	90.9	0.2	0.1	8.4	0.1	0.2
Indiana	100.0	98.2	0.7	0.6	—	0.5	—
Illinois	100.0	42.4	0.3	0.6	56.6	*	—
Michigan	100.0	73.3	0.8	0.7	24.3	0.9	—
Wisconsin	100.0	70.6	0.1	0.4	24.6	3.9	0.4
East North Central	**100.0**	**74.6**	**0.4**	**0.5**	**23.8**	**0.7**	**0.1**
Minnesota	100.0	65.1	1.1	0.8	30.4	1.6	1.0
Iowa	100.0	85.7	0.2	0.8	10.4	2.9	0.1
Missouri	100.0	82.2	0.2	0.5	13.6	3.7	—
North Dakota	100.0	93.5	0.1	(*)	—	6.4	—
South Dakota	100.0	38.5	0.1	0.2	—	61.2	—
Nebraska	100.0	58.5	0.1	1.4	34.7	5.3	—
Kansas	100.0	70.0	0.2	6.5	23.3	*	*
West North Central	**100.0**	**75.3**	**0.3**	**1.5**	**17.8**	**4.8**	**0.2**
Delaware	100.0	69.1	20.2	10.7	—	—	—
Maryland	100.0	74.0	10.6	4.2	4.0	7.3	—
District of Columbia	100.0	—	100.0	—	—	—	—
Virginia	100.0	44.5	2.5	1.6	50.5	0.9	*
West Virginia	100.0	99.1	0.4	*	—	0.6	—
North Carolina	100.0	58.4	0.2	0.2	32.5	8.7	—
South Carolina	100.0	33.0	0.1	1.0	61.9	3.9	—
Georgia	100.0	69.3	0.2	0.2	25.4	5.0	—
Florida	100.0	47.8	20.4	14.1	17.6	0.1	—
South Atlantic	**100.0**	**60.3**	**6.0**	**4.0**	**26.3**	**3.3**	*
Kentucky	100.0	95.5	0.2	*	–	4.3	—
Tennessee	100.0	68.0	0.2	0.1	19.0	12.9	—
Alabama	100.0	69.9	0.1	0.6	15.8	13.6	—
Mississippi	100.0	41.0	3.4	23.4	32.2	—	—
East South Central	**100.0**	**74.3**	**0.5**	**2.4**	**13.6**	**9.3**	**—**
Arkansas	100.0	51.7	0.2	7.7	30.4	10.0	—
Louisiana	100.0	30.6	0.2	44.8	24.4	—	—
Oklahoma	100.0	55.9	0.1	37.9	—	6.1	—
Texas	100.0	50.7	0.2	41.5	6.8	0.8	0.1
West South Central	**100.0**	**48.3**	**0.2**	**38.2**	**11.0**	**2.2**	**0.1**
Montana	100.0	57.9	0.1	0.2	—	41.5	0.3
Idaho	100.0	—	*	—	—	100.0	—
Wyoming	100.0	98.2	0.1	*	—	1.6	—
Colorado	100.0	94.5	0.1	1.3	—	4.1	*
New Mexico	100.0	90.6	0.1	8.5	—	0.7	—
Arizona	100.0	50.8	0.2	3.6	33.1	12.3	—
Utah	100.0	97.7	0.2	0.2	—	1.5	0.5
Nevada	100.0	76.1	1.5	11.5	—	9.0	—
Mountain	**100.0**	**75.7**	**0.2**	**3.0**	**8.3**	**12.7**	**0.1**
Washington	100.0	7.3	*	*	5.7	86.6	0.3
Oregon	100.0	2.6	0.1	1.6	12.4	83.3	*
California	100.0	—	3.8	39.5	28.5	20.8	7.4
Pacific	**100.0**	**3.3**	**1.7**	**17.4**	**16.8**	**57.5**	**3.3**
Alaska	100.0	6.9	7.5	63.9	—	21.7	—
Hawaii	100.0	—	99.6	—	—	0.3	0.1
Alaska & Hawaii	**100.0**	**2.5**	**66.5**	**23.0**	**—**	**8.0**	*

Note: Total may not equal sum of components due to independent rounding.
†Excludes petroleum coke.
††Includes petroleum coke.
**Less than one tenth of one percent.*
***Includes generation by geothermal, wood, waste, wind and solar.*
p Preliminary. ( ) Denotes negative value.
Source: U.S. Department of Energy, Energy Information Administration, Monthly Power Plant Report, *(EIA-759), as shown in Table 23.*

TABLE 25

CONSUMPTION OF FOSSIL FUELS FOR ELECTRIC GENERATION TOTAL ELECTRIC UTILITY INDUSTRY

BY YEAR AND KIND OF FUEL

Year	Coal* (Thousand Short Tons)	Fuel Oil (Thousand 42-Gallon Barrels)	Gas (Million Cubic Feet)	Total Fossil Fuel in Coal Equivalents**† (Thousand Short Tons)	Net Generation by Fuels** (kWh in Millions)	Heat Rate† (Btu per kWh)	Lbs. of Coal per kWh†
1990p	**771,678**	**196,175**	**2,786,153**	**986,374‡**	**1,939,706**	**10,367**	**0.990**
1989r	766,888	267,451	2,787,012	1,004,964‡	1,978,577	10,312	0.987
1988	758,372	248,096	2,635,613	984,969‡	1,942,353	10,328	0.984
1987	717,894	199,378	2,844,051	944,420‡	1,854,895	10,354	0.981
1986	685,056	230,482	2,602,370	970,720‡	1,770,925	10,423	0.989
1985	693,841	173,414	3,044,083	926,793‡	1,794,276	10,429	0.990
1984	664,399	204,479	3,111,342	909,156‡	1,758,882	10,385	0.990
1983	625,211	245,497	2,910,767	867,621‡	1,678,021	10,547	0.993
1982	593,666	249,771	3,225,518	858,869‡	1,644,062	10,517	0.996
1981	596,936	351,111	3,640,154	922,133‡	1,755,401	10,506	0.992
1980	569,453	420,214	3,681,595	916,952‡	1,753,749	10,489	0.980
1979	527,317	523,256	3,490,517	837,371	1,708,029	10,470	0.981
1978	481,624	635,829	3,188,370	811,814	1,646,163	10,495	0.986
1977	477,215	623,656	3,190,571	798,425	1,648,775	10,449	0.969
1976	448,431	555,583	3,080,627	740,112	1,558,951	10,369	0.950
1975	406,032	506,081	3,157,591	686,236	1,441,611	10,383	0.952
1974	392,344	536,140	3,429,072	685,115	1,449,079	10,481	0.946
1973	388,190	559,842	3,640,756	688,043	1,498,958	10,429	0.918
1972	352,391	493,663	3,976,762	647,968	1,421,136	10,479	0.912
1971	327,878	396,438	3,975,972	599,766	1,307,310	10,536	0.918
1970	320,818	335,504	3,931,996	573,152	1,261,474	10,508	0.909

** Beginning in 1982, petroleum coke excluded from Coal.*

*** Excludes geothermal, wood, waste, and nuclear fuels, and includes petroleum coke.*

† EEI estimate.

‡ Beginning in 1980, Coal Equivalents are calculated on the basis of Btu instead of generation data.

p Preliminary. r Revised.

Sources: U.S. Department of Energy, Energy Information Administration, Monthly Power Plant Report, *(EIA-759).*

TABLE 26

CONSUMPTION OF FOSSIL FUELS FOR ELECTRIC GENERATION TOTAL ELECTRIC UTILITY INDUSTRY

BY STATE AND KIND OF FUEL — YEAR 1990p

State/Division	Coal (Thousand Short Tons)	Fuel Oil (Thousand 42-Gallon Barrels)	Gas (Million Cubic Feet)	Total Fossil Fuel in Coal Equivalents†‡ (Thousand Short Tons)	Net Generation by Fuels† (kWh in Millions)	Heat Rate‡ (Btu per kWh)	Lbs. of Coal per kWh‡
Total United States	**771,678**	**196,175**	**2,786,153**	**986,374**	**1,939,706**	**10,367**	**0.990**
Maine	—	3,557	—	862	2,093	10,838	—
New Hampshire	1,146	4,020	—	2,125	5,252	10,770	0.775
Vermont	—	8	685	32	68	12,687	—
Massachusetts	4,201	23,993	55,226	12,203	31,109	9,840	0.745
Rhode Island	—	358	5,484	304	592	13,385	—
Connecticut	958	14,090	4,843	4,521	11,455	10,400	0.815
New England	**6,305**	**46,026**	**66,238**	**20,048**	**50,570**	**10,151**	**0.760**
New York	9,993	54,816	223,253	32,199	79,284	10,384	0.812
New Jersey	2,740	3,450	47,591	5,459	12,878	11,106	0.776
Pennsylvania	41,465	6,591	2,364	43,225	106,193	10,069	0.813
Middle Atlantic	**54,197**	**64,857**	**273,208**	**80,883**	**198,355**	**10,262**	**0.811**
Ohio	48,848	588	1,254	49,051	115,407	9,946	0.849
Indiana	47,654	423	6,632	48,095	97,297	10,199	0.993
Illinois	27,396	2,113	9,195	28,465	55,029	11,030	1.017
Michigan	29,726	1,488	22,999	30,365	66,650	10,048	0.910
Wisconsin	18,133	113	2,381	18,296	32,361	10,836	1.128
East North Central	**171,756**	**4,725**	**42,463**	**174,272**	**366,745**	**10,275**	**0.948**
Minnesota	16,916	93	5,231	17,246	26,771	10,584	1.301
Iowa	15,331	123	3,478	15,569	25,162	11,008	1.232
Missouri	24,231	215	3,532	24,467	48,857	10,357	0.999
North Dakota	21,579	57	2	21,604	25,113	11,758	1.720
South Dakota	2,345	32	235	2,377	2,496	11,776	1.896
Nebraska	8,027	31	3,766	8,250	12,979	10,686	1.268
Kansas	15,018	152	26,978	16,565	25,982	12,163	1.266
West North Central	**103,445**	**702**	**43,223**	**106,078**	**167,358**	**11,002**	**1.267**
Delaware	2,056	2,100	10,776	3,001	7,100	10,884	0.838
Maryland	8,945	6,832	17,536	11,336	27,947	10,338	0.768
District of Columbia	—	871	—	212	361	14,463	—
Virginia	8,228	1,902	6,299	8,947	22,939	9,913	0.784
West Virginia	29,873	368	139	29,959	76,929	9,722	0.780
North Carolina	18,005	373	2,461	18,192	46,983	9,727	0.772
South Carolina	9,131	125	6,975	9,458	23,650	9,597	0.798
Georgia	27,812	333	1,932	27,979	67,881	9,787	0.823
Florida	24,022	40,620	188,293	42,253	101,671	10,177	0.813
South Atlantic	**128,072**	**53,525**	**234,412**	**151,337**	**375,461**	**9,933**	**0.796**
Kentucky	30,867	212	283	30,932	70,647	9,852	0.876
Tennessee	20,814	232	565	20,896	50,363	9,922	0.829
Alabama	22,010	133	3,958	22,209	53,813	10,572	0.826
Mississippi	3,888	1,349	65,304	6,905	15,627	10,346	0.823
East South Central	**77,579**	**1,926**	**70,110**	**80,942**	**190,450**	**10,112**	**0.846**
Arkansas	11,836	155	32,090	13,851	22,074	10,748	1.235
Louisiana	11,748	234	268,797	29,506	43,991	10,779	1.320
Oklahoma	14,866	86	168,960	24,966	42,313	10,368	1.180
Texas	85,377	954	1,007,381	152,901	216,550	10,678	1.437
West South Central	**123,828**	**1,430**	**1,477,228**	**221,223**	**324,928**	**10,653**	**1.369**
Montana	9,399	63	418	9,449	14,971	12,182	1.261
Idaho	—	2	—	1	1	11,856	—
Wyoming	23,526	99	69	23,563	38,734	10,643	1.216
Colorado	15,924	50	5,485	16,207	30,037	10,641	1.076
New Mexico	15,065	69	25,420	16,532	28,286	10,715	1.167
Arizona	15,758	210	24,278	17,007	34,024	10,544	0.996
Utah	13,563	84	907	13,626	31,623	10,223	0.861
Nevada	7,270	535	24,348	8,565	17,554	10,659	0.966
Mountain	**100,505**	**1,112**	**80,924**	**104,950**	**195,229**	**10,695**	**1.074**
Washington	4,852	31	191	4,876	7,381	10,476	1.320
Oregon	850	56	7,386	1,331	2,136	10,150	1.310
California	—	7,358	456,406	31,993	49,607	10,541	—
Pacific	**5,702**	**7,445**	**463,982**	**38,200**	**59,124**	**10,521**	**1.319**
Alaska	290	658	34,366	2,709	3,519	13,189	1.859
Hawaii	—	13,769	—	5,733	7,967	11,424	—
Alaska & Hawaii	**290**	**14,427**	**34,366**	**8,442**	**11,486**	**11,938**	**1.859**

Note: Total may not equal sum of components due to independent rounding.

† Excludes geothermal, wood, waste, and nuclear fuels, and includes petroleum coke.

‡ EEI estimate.

p Preliminary.

Source: U.S. Department of Energy, Energy Information Administration, Monthly Power Plant Report *(EIA-759).*

TABLE 27

FOSSIL FUELS USED FOR ELECTRIC GENERATION TOTAL ELECTRIC UTILITY INDUSTRY

FUEL BURNED UNDER BOILERS AND BY INTERNAL COMBUSTION ENGINES
1987–1990 BY GEOGRAPHIC DIVISION

		Composite Averages			Coal (a)			Oil (b)			Gas (c)		
Division	Year	Cost per Million Btu Consumed	Cost of Fuel per Net kWh	Btu per Net kWh	Cost per Million Btu Consumed	Cost per Ton	Btu per Pound	Cost per Million Btu Consumed	Cost per Bbl	Btu per Gallon	Cost per Million Btu Consumed	Cost per MCF	Btu per Cu Ft
United States	1990	174.1¢	1.80¢	10,367	151.2¢	$31.73	10,491	332.1¢	$20.85	149,453	234.2¢	240.53¢	1,027
	1989	174.0	1.79	10,312	150.3	31.49	10,478	293.7	18.33	148,572	238.4	244.64	1,026
	1988	170.7	1.76	10,328	152.2	31.99	10,511	260.5	16.32	149,097	227.7	234.06	1,028
	1987	177.7	1.84	10,354	157.8	33.32	10,556	304.2	19.04	149,015	226.6	233.52	1,030
New England	1990	250.7	2.54	10,151	184.4	48.10	13,042	290.2	18.36	150,618	247.0	253.35	1,026
	1989	239.3	2.44	10,213	168.3	43.98	13,066	270.4	17.02	149,924	243.1	253.57	1,043
	1988	224.4	2.29	10,213	194.3	51.07	13,141	237.2	14.93	149,833	225.4	231.22	1,026
	1987	252.9	2.58	10,212	195.4	51.38	13,147	282.0	17.80	150,288	244.8	251.27	1,027
Middle Atlantic	1990	216.2	2.22	10,262	161.4	40.22	12,457	359.8	22.32	147,719	269.5	277.89	1,031
	1989	206.2	2.12	10,292	155.9	38.87	12,465	305.7	19.08	148,575	263.4	270.66	1,028
	1988	192.4	1.98	10,317	154.3	38.78	12,569	268.3	16.74	148,549	245.6	252.64	1,028
	1987	205.6	2.12	10,332	156.6	38.98	12,450	311.5	19.37	148,050	272.7	280.49	1,028
East North Central	1990	160.3	1.65	10,275	158.7	34.61	10,905	377.3	23.15	146,066	225.0	120.28	535
	1989	161.7	1.67	10,317	159.6	35.23	11,039	350.9	21.51	145,916	266.5	120.49	452
	1988	166.2	1.72	10,379	164.1	36.44	11,102	325.5	20.06	146,747	278.3	147.35	530
	1987	174.5	1.81	10,350	172.2	38.34	11,133	385.1	24.00	148,393	298.1	163.17	547
West North Central	1990	119.2	1.31	11,002	117.2	20.57	8,774	427.3	25.11	139,890	196.8	195.71	995
	1989	118.4	1.30	11,006	116.5	20.39	8,750	377.8	22.09	139,207	221.1	217.52	984
	1988	122.2	1.33	10,852	120.2	20.89	8,687	350.5	20.96	142,364	213.1	210.89	990
	1987	129.0	1.41	10,969	127.2	22.40	8,807	396.5	23.27	139,729	225.3	223.98	994
South Atlantic	1990	193.3	1.92	9,933	177.2	43.68	12,327	308.5	19.43	149,963	253.5	257.60	1,016
	1989	188.8	1.89	10,016	173.6	42.94	12,365	277.5	17.45	149,766	247.0	250.71	1,015
	1988	181.8	1.81	9,939	172.8	42.92	12,416	246.4	15.54	150,189	215.6	217.77	1,010
	1987	190.5	1.90	9,947	175.6	43.55	12,402	292.9	18.44	149,903	271.4	273.80	1,009
East South Central	1990	152.5	1.54	10,112	150.6	35.96	11,937	322.4	20.02	147,833	181.4	186.99	1,031
	1989	155.8	1.57	10,066	154.3	36.62	11,869	288.2	18.00	148,668	190.5	184.11	967
	1988	157.3	1.57	10,003	155.5	37.12	11,933	356.0	21.76	145,501	190.0	194.26	1,022
	1987	162.1	1.64	10,137	161.0	38.57	11,979	405.6	24.07	141,326	188.2	193.54	1,028
West South Central	1990	179.2	1.91	10,653	150.3	24.01	7,986	481.1	28.96	143,304	213.9	221.91	1,038
	1989	182.2	1.90	10,449	148.8	23.04	7,742	414.4	24.95	143,385	218.1	225.92	1,036
	1988	180.2	1.89	10,475	153.7	23.82	7,749	418.9	25.63	145,643	208.9	216.40	1,036
	1987	183.1	1.92	10,470	161.0	24.71	7,672	467.9	28.23	143,673	205.1	212.70	1,037
Mountain	1990	118.6	1.27	10,695	113.6	22.22	9,774	417.6	25.00	142,552	210.6	216.89	1,030
	1989	119.5	1.24	10,351	112.4	21.78	9,685	352.3	21.04	142,227	218.7	224.99	1,029
	1988	116.6	1.24	10,647	111.7	21.73	9,729	296.5	18.21	146,267	222.9	227.82	1,022
	1987	116.6	1.25	10,720	111.6	21.74	9,737	324.4	19.83	145,515	235.2	241.25	1,026
Pacific	1990	274.4	2.89	10,521	148.1	24.00	8,104	348.6	21.44	146,407	287.7	298.31	1,037
	1989	275.0	2.84	10,321	148.9	24.18	8,121	297.0	18.26	146,358	292.8	304.21	1,039
	1988	266.2	2.76	10,377	144.4	23.40	8,103	272.6	16.95	148,075	285.5	295.92	1,037
	1987	244.2	2.56	10,478	161.4	26.07	8,075	298.4	18.30	146,027	253.3	263.38	1,040
Alaska	1990	160.4	2.12	13,189	245.6	38.87	7,915	639.0	37.06	138,091	112.7	113.04	1,003
	1989	135.3	1.66	12,260	194.8	30.68	7,874	432.8	25.14	138,292	104.2	104.31	1,001
	1988	124.8	1.48	11,841	263.5	41.13	7,806	618.0	35.97	138,581	99.7	99.85	1,001
	1987	118.0	1.50	12,670	199.8	31.26	7,823	376.2	22.13	140,038	87.2	87.84	1,007
Hawaii	1990	376.7	4.30	11,424	—	—	—	376.7	24.83	156,945	—	—	—
	1989	328.8	3.42	10,388	—	—	—	328.8	19.60	141,928	—	—	—
	1988	293.6	3.12	10,640	—	—	—	293.6	18.29	148,286	—	—	—
	1987	345.2	3.66	10,598	—	—	—	345.2	21.53	148,458	—	—	—

(a) Coal includes bituminous and anthracite coal and relatively small amounts of lignite.
(b) Oil includes fuel oil, crude oil, and small amounts of tar and gasoline, and petroleum coke.
(c) Gas includes natural and manufactured gas and waste gas.

TABLE 28

NUCLEAR FUEL USED FOR ELECTRIC GENERATION

1987–1990 BY GEOGRAPHIC DIVISION

Division	Year	Average Cost per million Btu Consumed (cents)	Average Cost of Fuel per Net kWh (mills)	Average Btu per Net kWh
United States	1990	65.01¢	7.16	11,016
	1989	68.53	7.63	11,133
	1988	72.64	7.88	10,854
	1987	71.11	7.68	10,803
New England	1990	74.60	7.88	10,565
	1989	76.64	8.16	10,654
	1988	79.13	8.54	10,792
	1987	84.90	9.05	10,663
Middle Atlantic	1990	60.45	6.63	10,974
	1989	65.41	7.35	11,239
	1988	65.29	7.12	10,912
	1987	68.67	7.51	10,931
East North Central	1990	65.42	7.02	10,738
	1989	69.60	7.49	10,767
	1988	76.48	8.30	10,848
	1987	70.15	7.66	10,922
West North Central	1990	52.23	5.54	10,606
	1989	52.77	5.60	10,614
	1988	58.25	6.21	10,664
	1987	58.38	6.23	10,664
South Atlantic	1990	59.28	6.38	10,765
	1989	63.82	6.84	10,723
	1988	68.05	7.29	10,709
	1987	64.22	6.89	10,725
East South Central	1990	84.86	9.18	10,815
	1989	85.20	9.19	10,790
	1988	91.48	10.09	11,034
	1987	74.13	8.30	11,193
West South Central	1990	72.56	7.79	10,733
	1989	73.88	7.98	10,805
	1988	81.96	8.78	10,715
	1987	85.96	9.24	10,754
Mountain	1990	77.94	8.10	10,390
	1989	80.64	8.57	10,626
	1988	81.77	8.49	10,383
	1987	85.05	8.85	10,408
Pacific	1990	69.03	7.27	10,531
	1989	75.27	7.97	10,591
	1988	78.47	8.36	10,659
	1987	86.66	9.30	10,735
Alaska & Hawaii	1990	—	—	—
	1989	—	—	—
	1988	—	—	—
	1987	—	—	—

TABLE 29

FOSSILS FUELS USED FOR ELECTRIC GENERATION TOTAL ELECTRIC UTILITY INDUSTRY

FUEL BURNED UNDER BOILERS AND BY INTERNAL COMBUSTION ENGINES
BY STATE — YEAR 1990

State/Division	Composite Averages			Coal (a)			Oil (b)			Gas (c)		
	Cost per Million Btu Consumed	Cost of Fuel per Net kWh	Btu per Net kWh	Cost per Million Btu Consumed	Cost per Ton	Btu per Pound	Cost per Million Btu Consumed	Cost per Bbl	Btu per Gallon	Cost per Million Btu Consumed	Cost per MCF	Btu per Cu Ft
Total United States	**174.1¢**	**1.80¢**	**10,367**	**151.2¢**	**$31.73**	**10,491**	**332.1¢**	**$20.85**	**149,453**	**234.2¢**	**240.53¢**	**1,027**
Maine	278.7	3.02	10,838	—	—	—	278.7	17.62	150,562	—	—	—
New Hampshire	197.7	2.13	10,770	175.5	46.72	13,308	223.6	14.50	154,386	—	—	—
Vermont	201.1	2.55	12,687	—	—	—	383.6	21.95	136,215	189.4	220.03	1,162
Massachusetts	248.4	2.44	9,840	178.8	46.37	12,966	301.7	18.99	149,857	248.5	254.09	1,023
Rhode Island	257.9	3.45	13,385	—	—	—	359.2	22.64	150,059	216.8	224.16	1,034
Connecticut	276.1	2.87	10,400	218.5	57.78	13,225	292.6	18.53	150,801	274.9	283.65	1,032
New England	**250.7**	**2.54**	**10,151**	**184.4**	**48.10**	**13,042**	**290.2**	**18.36**	**150,618**	**247.0**	**253.35**	**1,026**
New York	274.8	2.85	10,384	164.6	42.21	12,822	361.3	22.36	147,370	266.5	274.73	1,031
New Jersey	248.7	2.76	11,106	195.1	51.16	13,114	352.8	22.64	152,804	280.5	289.70	1,033
Pennsylvania	166.7	1.68	10,069	158.3	39.03	12,328	351.4	21.84	147,965	312.6	322.41	1,031
Middle Atlantic	**216.2**	**2.22**	**10,262**	**161.4**	**40.22**	**12,457**	**359.8**	**22.32**	**147,719**	**269.5**	**277.89**	**1,031**
Ohio	157.7	1.57	9,946	156.7	37.05	11,818	454.2	27.00	141,525	263.5	271.49	1,030
Indiana	142.0	1.45	10,199	140.8	29.49	10,472	472.5	27.15	136,789	245.3	251.87	1,027
Illinois	195.9	2.16	11,030	192.7	40.93	10,622	361.1	22.79	150,267	248.3	253.30	1,020
Michigan	166.3	1.67	10,048	164.7	36.77	11,164	339.3	20.63	144,748	146.5	33.26	227
Wisconsin	145.9	1.58	10,836	144.6	27.74	9,593	435.8	25.26	137,995	271.3	281.05	1,036
East North Central	**160.3**	**1.65**	**10,275**	**158.7**	**34.61**	**10,905**	**377.3**	**23.15**	**146,066**	**225.0**	**120.28**	**535**
Minnesota	133.2	1.41	10,584	132.2	23.20	8,772	428.2	25.02	139,095	194.0	194.53	1,003
Iowa	118.8	1.31	11,008	116.3	20.57	8,839	459.5	26.84	139,091	272.9	273.91	1,004
Missouri	139.4	1.44	10,357	138.8	28.82	10,382	421.7	25.11	141,753	167.2	171.14	1,023
North Dakota	70.9	0.83	11,758	70.4	9.68	6,869	479.3	28.19	140,030	396.5	406.75	1,026
South Dakota	112.5	1.32	11,776	110.7	14.37	6,488	410.7	23.62	136,922	185.2	185.63	1,003
Nebraska	90.5	0.97	10,686	86.5	14.80	8,554	436.9	24.84	135,385	363.8	350.85	965
Kansas	124.6	1.52	12,163	119.8	21.40	8,930	367.0	21.75	141,154	179.8	178.14	991
West North Central	**119.2**	**1.31**	**11,002**	**117.2**	**20.57**	**8,774**	**427.3**	**25.11**	**139,890**	**196.8**	**195.71**	**995**
Delaware	218.4	2.38	10,884	189.8	48.78	12,853	315.9	19.82	149,332	257.0	265.48	1,033
Maryland	198.9	2.06	10,338	172.1	43.82	12,735	320.1	19.97	148,510	247.9	258.15	1,042
District of Columbia	375.1	5.43	14,463	—	—	—	375.1	22.50	142,833	—	—	—
Virginia	168.3	1.67	9,913	157.1	39.98	12,722	345.3	21.33	147,071	215.4	224.06	1,040
West Virginia	151.4	1.47	9,722	150.6	37.48	12,439	570.2	33.14	138,385	—	—	—
North Carolina	183.7	1.79	9,727	182.3	45.96	12,603	473.2	27.55	138,607	279.2	287.82	1,031
South Carolina	186.0	1.78	9,597	185.1	44.63	12,054	494.7	29.27	140,876	201.4	206.18	1,024
Georgia	189.9	1.86	9,787	188.7	44.83	11,876	450.3	26.81	141,750	311.1	319.27	1,026
Florida	233.1	2.37	10,177	198.4	48.71	12,275	299.3	18.95	150,768	256.9	259.86	1,011
South Atlantic	**193.3**	**1.92**	**9,933**	**177.2**	**43.68**	**12,327**	**308.5**	**19.43**	**149,963**	**253.5**	**257.60**	**1,016**
Kentucky	127.7	1.26	9,852	127.5	29.87	11,715	480.7	28.07	139,014	274.7	278.02	1,012
Tennessee	140.5	1.39	9,922	139.7	33.29	11,911	429.7	25.27	140,000	212.6	220.00	1,035
Alabama	184.6	1.95	10,572	184.0	44.69	12,149	464.3	26.40	135,380	218.2	224.83	1,030
Mississippi	186.6	1.93	10,346	183.7	46.22	12,577	282.3	17.91	151,106	178.1	183.61	1,031
East South Central	**152.5**	**1.54**	**10,112**	**150.6**	**35.96**	**11,937**	**322.4**	**20.02**	**147,833**	**181.4**	**186.99**	**1,031**
Arkansas	162.0	1.74	10,748	162.4	27.87	8,578	544.2	31.88	139,474	153.6	161.16	1,049
Louisiana	173.1	1.87	10,779	177.9	28.14	7,911	400.6	24.18	143,719	168.6	175.33	1,040
Oklahoma	205.9	2.13	10,368	143.3	25.18	8,784	310.7	19.13	146,548	298.1	312.17	1,047
Texas	176.8	1.89	10,678	146.2	22.70	7,763	516.8	31.09	143,247	212.2	219.66	1,035
West South Central	**179.2**	**1.91**	**10,653**	**150.3**	**24.01**	**7,986**	**481.1**	**28.96**	**143,304**	**213.9**	**221.91**	**1,038**
Montana	61.2	0.75	12,182	60.6	10.39	8,572	532.4	31.53	141,000	167.5	193.96	1,158
Idaho	617.1	7.32	11,856	—	—	—	617.1	36.30	140,045	—	—	—
Wyoming	89.9	0.96	10,643	89.4	15.74	8,798	514.3	30.37	140,623	312.6	323.19	1,039
Colorado	116.7	1.24	10,641	114.6	22.56	9,844	461.2	26.59	137,261	218.7	210.37	962
New Mexico	134.2	1.44	10,715	126.4	23.07	9,127	326.8	18.92	137,802	207.8	215.71	1,038
Arizona	157.8	1.66	10,544	150.9	31.74	10,514	628.6	36.82	139,460	227.3	234.40	1,031
Utah	102.5	1.05	10,223	101.7	23.81	11,700	548.4	32.17	139,654	195.4	211.43	1,082
Nevada	169.3	1.80	10,659	161.0	35.25	10,945	332.2	20.15	144,409	200.1	206.23	1,031
Mountain	**118.6**	**1.27**	**10,695**	**113.6**	**22.22**	**9,774**	**417.6**	**25.00**	**142,552**	**210.6**	**216.89**	**1,030**
Washington	151.2	1.58	10,476	150.6	24.34	8,083	576.2	35.01	144,692	68.9	71.03	1,031
Oregon	152.4	1.55	10,150	129.5	21.41	8,267	522.3	30.40	138,600	170.4	172.30	1,011
California	296.6	3.13	10,541	—	—	—	347.3	21.36	146,446	289.7	300.47	1,037
Pacific	**274.4**	**2.89**	**10,521**	**148.1**	**24.00**	**8,104**	**348.6**	**21.44**	**146,407**	**287.7**	**298.31**	**1,037**
Alaska	160.4	2.12	13,189	245.6	38.87	7,915	639.0	37.06	138,091	112.7	113.04	1,003
Hawaii	376.7	4.30	11,424	—	—	—	376.7	24.83	156,945	—	—	—
Alaska & Hawaii	**307.1**	**3.67**	**11,938**	**245.6**	**38.87**	**7,915**	**382.6**	**25.14**	**156,460**	**112.7**	**113.04**	**1,003**

See page 34 for footnotes.

TABLE 30

NUCLEAR FUEL USED FOR ELECTRIC GENERATION

BY STATE — YEAR 1990

State/Division	Average Cost per Million Btu Consumed (cents)	Average Cost of Fuel per Net kWh (mills)	Average Btu per Net kWh
Total United States	**65.01¢**	**7.16**	**11,016**
Maine	47.25	4.96	10,507
New Hampshire	—	—	—
Vermont	48.89	5.22	10,670
Massachusetts	62.29	6.63	10,638
Rhode Island	—	—	—
Connecticut	89.11	9.39	10,541
New England	**74.60**	**7.88**	**10,565**
New York	64.46	6.93	10,755
New Jersey	60.78	6.55	10,778
Pennsylvania	58.69	6.54	11,148
Middle Atlantic	**60.45**	**6.63**	**10,974**
Ohio	108.15	11.40	10,539
Indiana	—	—	—
Illinois	58.39	6.24	10,694
Michigan	75.97	8.39	11,048
Wisconsin	48.60	5.16	10,608
East North Central	**65.42**	**7.02**	**10,738**
Minnesota	46.99	5.08	10,820
Iowa	68.00	7.43	10,923
Missouri	65.69	6.85	10,435
North Dakota	—	—	—
South Dakota	—	—	—
Nebraska	61.24	6.56	10,713
Kansas	31.37	3.21	10,224
West North Central	**52.23**	**5.54**	**10,606**
Delaware	—	—	—
Maryland	50.79	6.01	11,831
District of Columbia	—	—	—
Virginia	46.00	5.00	10,865
West Virginia	—	—	—
North Carolina	54.03	5.80	10,732
South Carolina	53.10	5.59	10,522
Georgia	85.00	9.26	10,890
Florida	62.92	6.90	10,970
South Atlantic	**59.28**	**6.38**	**10,765**
Kentucky	—	—	—
Tennessee	83.55	8.81	10,541
Alabama	64.45	7.13	11,067
Mississippi	121.13	13.23	10,919
East South Central	**84.86**	**9.18**	**10,815**
Arkansas	71.74	7.76	10,811
Louisiana	87.98	9.41	10,693
Oklahoma	—	—	—
Texas	59.36	6.36	10,712
West South Central	**72.56**	**7.79**	**10,733**
Montana	—	—	—
Idaho	—	—	—
Wyoming	—	—	—
Colorado	N/A	N/A	N/A
New Mexico	—	—	—
Arizona	77.94	8.10	10,390
Utah	—	—	—
Nevada	—	—	—
Mountain	**77.94**	**8.10**	**10,390**
Washington	52.02	5.50	10,566
Oregon	45.00	4.81	10,690
California	76.58	8.04	10,496
Pacific	**69.03**	**7.27**	**10,531**
Alaska	—	—	—
Hawaii	—	—	—
Alaska & Hawaii	**—**	**—**	**—**

N/A Not Available

TABLE 31

AVERAGE COST OF FOSSIL FUELS DELIVERED TO STEAM-ELECTRIC UTILITY PLANTS

BY YEAR
(CENTS PER MILLION BTU)

Year	Coal	Residual Oil*	Natural Gas**	All Fossil Fuels**
1990	145.4	331.9	232.1	168.8
1989	144.5	284.6	235.5	167.5
1988	146.6	240.5	226.3	164.3
1987	150.6	297.6	224.0	170.6
1986	157.9	240.1	235.1	175.0
1985	164.8	424.4	344.4	209.4

Residual fuel oil prices include Fuel Oil No. 4, No. 5, No. 6, and topped crude fuel oil prices. The weighted average for all fossil fuels includes both residual fuel oil prices and light oil (Fuel Oil No. 2, kerosene, and jet fuel) prices.
**Includes small quantities of coke oven gas, refinery gas and blast furnace gas.*
Source: U.S. Department of Energy, Energy Information Administration, Monthly Energy Review.

SECTION V

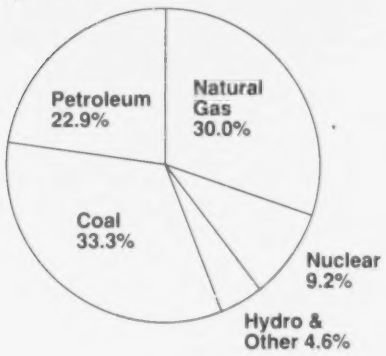
ENERGY

CHART V-A

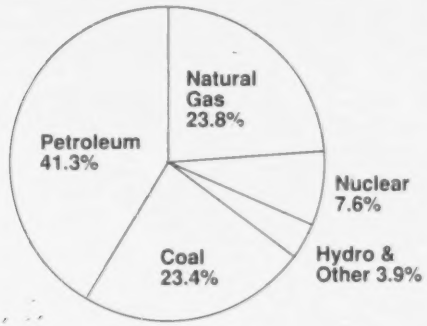
ENERGY PRODUCTION AND CONSUMPTION

BY PRIMARY ENERGY SOURCE

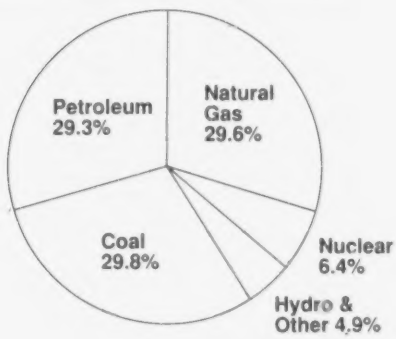
1990 Production
Total BTU's = 67.548 Quads



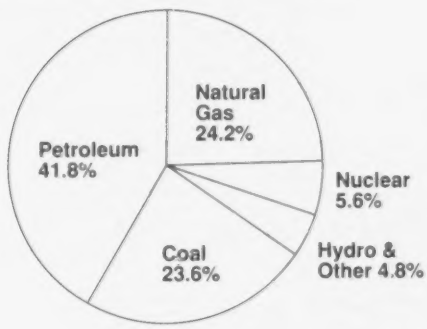
1990 Consumption
Total BTU's = 81.490 Quads



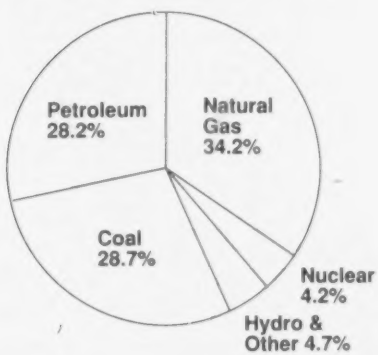
1985 Production
Total BTU's = 64.765 Quads



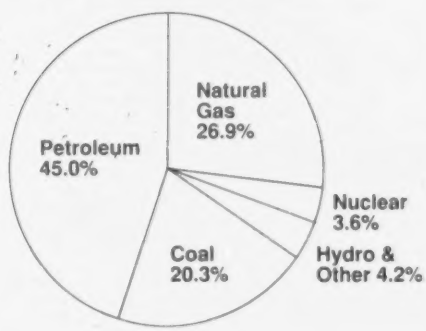
1985 Consumption
Total BTU's = 73.945 Quads



1980 Production
Total BTU's = 64.761 Quads



1980 Consumption
Total BTU's = 75.955 Quads



Source: U.S. Department of Energy. Energy Information Administration. 'Monthly Energy Review' May, 1991.

TABLE 32
ENERGY SUPPLY AND DISPOSITION BALANCE
BY YEAR
(QUADRILLION BTU)

	1990p	1989r	1988	1987	1986	1985	1984	1983	1982	1981	1980
SUPPLY											
Production											
Crude Oil & Lease Condensate	15.46	16.12	17.28	17.67	18.38	18.99	18.85	18.39	18.31	18.15	18.25
Natural Gas Plant Liquids	2.16	2.16	2.26	2.22	2.15	2.24	2.27	2.18	2.19	2.31	2.25
Natural Gas	18.05	17.78	17.52r	17.05	16.47	16.91	17.93	16.53	18.25	19.70	19.91
Coal	22.61	21.35	20.74	20.14	19.51	19.33	19.72	17.25	18.64	18.38	18.60
Nuclear	6.19	5.68	5.66	4.91	4.47	4.15	3.55	3.20	3.13	3.01	2.74
Hydro	2.92	2.77	2.31	2.59	3.02	2.94	3.35	3.53	3.27	2.76	2.90
Other	0.20	0.22	0.23	0.24	0.23	0.21	0.17	0.13	0.11	0.13	0.11
Total Production	**67.59**	**66.06**	**66.01r**	**64.82**	**64.23**	**64.77**	**65.84**	**61.21**	**63.90**	**64.42**	**64.76**
Imports											
Crude Oil	12.67	12.60	11.03	10.07	9.00	6.81	7.30	7.08	7.42	9.34	11.19
Refined Petroleum Products	4.26	4.57	4.72	4.10	4.20	3.80	4.13	3.57	3.36	3.30	3.46
Natural Gas	1.51	1.39	1.30	0.99	0.75	0.95	0.85	0.94	0.95	0.92	1.01
Other	0.29	0.40	0.52	0.60	0.48	0.54	0.48	0.44	0.36	0.42	0.31
Total Imports	**18.74**	**18.95**	**17.56**	**15.76**	**14.43**	**12.10**	**12.76**	**12.03**	**12.09**	**13.97**	**15.97**
Adjustments	0.02	1.10	1.04r	0.12	(0.36)	1.31	(0.70)	1.00	(0.51)	(0.08)	(1.05)
Total Supply	**86.35**	**86.11**	**84.61**	**80.70**	**78.30**	**78.18**	**77.90**	**74.24**	**75.48**	**78.32**	**79.68**
DISPOSITION											
Exports											
Coal	2.77	2.64	2.50	2.09	2.25	2.44	2.15	2.04	2.79	2.94	2.42
Other	2.14	2.13	1.91	1.76	1.81	1.80	1.65	1.68	1.84	1.38	1.30
Total Exports	**4.91**	**4.77**	**4.41**	**3.85**	**4.05**	**4.23**	**3.80**	**3.72**	**4.63**	**4.33**	**3.72**
Consumption											
Refined Petroleum Products	33.64	34.21	34.22r	32.87	32.20	30.92	31.05	30.05	30.23	31.93	34.20
Natural Gas	19.41	19.38	18.55	17.74	16.71	17.83	18.51	17.36	18.51	19.93	20.39
Coal	19.05	18.94	18.85	18.01	17.26	17.48	17.07	15.89	15.32	15.91	15.42
Nuclear	6.19	5.68	5.66	4.91	4.47	4.15	3.55	3.20	3.13	3.01	2.74
Hydro	2.94	2.88	2.64	3.07	3.39	3.36	3.76	3.90	3.57	3.11	3.12
Other	0.21	0.25	0.27	0.25	0.21	0.20	0.16	0.12	0.09	0.11	0.08
Total Consumption	**81.44**	**81.35**	**80.20**	**76.84**	**74.24**	**73.95**	**74.10**	**70.52**	**70.85**	**73.99**	**75.96**
Total Disposition	**86.35**	**86.11**	**84.61**	**80.70**	**78.30**	**78.18**	**77.90**	**74.24**	**75.48**	**78.32**	**79.68**

	1979	1978	1977	1976	1975	1974	1973	1972	1971	1970
SUPPLY										
Production										
Crude Oil & Lease Condensate	18.10	18.43	17.45	17.26	17.73	18.57	19.49	20.04	20.03	20.40
Natural Gas Plant Liquids	2.29	2.25	2.33	2.33	2.37	2.47	2.57	2.60	2.54	2.51
Natural Gas	20.08	19.49	19.57	19.48	19.64	21.21	22.19	22.21	22.28	21.67
Coal	17.54	14.91	15.76	15.65	14.99	14.07	13.99	14.09	13.19	14.61
Nuclear	2.78	3.02	2.70	2.11	1.90	1.27	0.91	0.58	0.41	0.24
Hydro	2.93	2.94	2.33	2.98	3.15	3.18	2.86	2.86	2.82	2.63
Other	0.09	0.07	0.08	0.08	0.07	0.06	0.05	0.03	0.02	0.02
Total Production	**63.80**	**61.10**	**60.22**	**59.89**	**59.86**	**60.84**	**62.06**	**62.42**	**61.29**	**62.07**
Imports										
Crude Oil	13.83	13.46	14.03	11.24	8.72	7.40	6.89	4.71	3.57	2.81
Refined Petroleum Products	4.11	4.36	4.73	4.43	4.23	5.73	6.58	5.59	4.97	4.66
Natural Gas	1.30	0.99	1.04	0.99	0.98	0.99	1.06	1.05	0.96	0.85
Other	0.38	0.44	0.30	0.18	0.19	0.30	0.21	0.11	0.08	0.07
Total Imports	**19.62**	**19.25**	**20.09**	**16.84**	**14.11**	**14.41**	**14.73**	**11.46**	**9.58**	**8.39**
Adjustments	(1.65)	(0.34)	(1.95)	(0.18)	(1.07)	(0.48)	(0.46)	(0.48)	(0.82)	(1.37)
Total Supply	**81.77**	**80.02**	**78.36**	**76.55**	**72.91**	**74.77**	**76.33**	**73.40**	**70.06**	**69.10**
DISPOSITION										
Exports										
Coal	1.75	1.08	1.44	1.60	1.76	1.62	1.43	1.53	1.55	1.94
Other	1.11	0.86	0.63	0.59	0.60	0.60	0.63	0.61	0.63	0.73
Total Exports	**2.87**	**1.93**	**2.07**	**2.19**	**2.36**	**2.22**	**2.05**	**2.14**	**2.18**	**2.66**
Consumption										
Refined Petroleum Products	37.12	37.97	37.12	35.17	32.73	33.45	34.84	32.95	30.56	29.52
Natural Gas	20.67	20.00	19.93	20.35	19.95	21.73	22.51	22.70	22.47	21.79
Coal	15.04	13.77	13.92	13.58	12.66	12.66	12.97	12.08	11.60	12.26
Nuclear	2.78	3.02	2.70	2.11	1.90	1.27	0.91	0.58	0.41	0.24
Hydro	3.14	3.14	2.51	3.07	3.22	3.31	3.01	2.94	2.86	2.65
Other	0.15	0.19	0.10	0.08	0.09	1.12	0.04	0.01	(0.02)	(0.04)
Total Consumption	**78.90**	**78.09**	**76.29**	**74.36**	**70.55**	**72.54**	**74.28**	**71.26**	**67.89**	**66.43**
Total Disposition	**81.77**	**80.02**	**78.36**	**76.55**	**72.91**	**74.77**	**76.33**	**73.40**	**70.06**	**69.10**

Note: Total may not equal sum of components due to independent rounding.
( ) Denotes negative value. p Preliminary. r Revised.
Source: U.S. Department of Energy, Energy Information Administration, Annual Energy Review 1990.

TABLE 33

ANNUAL CONSUMPTION OF FOSSIL ENERGY RESOURCES

BY KIND OF FUEL, BY SECTOR*
(QUADRILLION BTU)

	1990p	1989r	1988	1987	1986	1985
Coal						
Residential & Commercial	0.16	0.15	0.17	0.16	0.18	0.18
Industrial	2.78	2.81	2.83	2.67	2.64	2.76
Transportation	**	**	**	**	**	**
Electric Utilities	16.16	15.99	15.85	15.17	14.44	14.54
Total	19.09	18.94	18.85	18.01	17.26	17.48
Natural Gas (Dry)						
Residential & Commercial	7.29	7.72	7.51	6.95	6.83r	7.08
Industrial	8.65	8.12	7.70r	7.32r	6.69	7.08
Transportation	0.60	0.65	0.63	0.54	0.50	0.52
Electric Utilities	2.88	2.88	2.71	2.94	2.69	3.16
Total	19.42	19.38	18.55	17.74r	16.71	17.83
Petroleum						
Residential & Commercial	2.50	2.63	2.69	2.62	2.58	2.57
Industrial	8.49	8.21	8.46	8.21	7.95	7.73
Transportation	21.41	21.69	21.51	20.78	20.22	19.53
Electric Utilities	1.25	1.69	1.56	1.26	1.45	1.09
Total	33.64	34.21	34.22r	32.87	32.20	30.92

Note: Total may not equal sum of components due to independent rounding.
**Sector data excludes electricity sales and energy losses attributed to electric generation.*
***Since 1978 the amount of coal consumed by the transportation sector has been negligible.*
Total consumption by fuels will not agree with Energy Supply and Disposition Balance (Table 32) due to data revisions.
p Preliminary. r Revised.
Source: U.S. Department of Energy. Energy Information Administration. Monthly Energy Review.

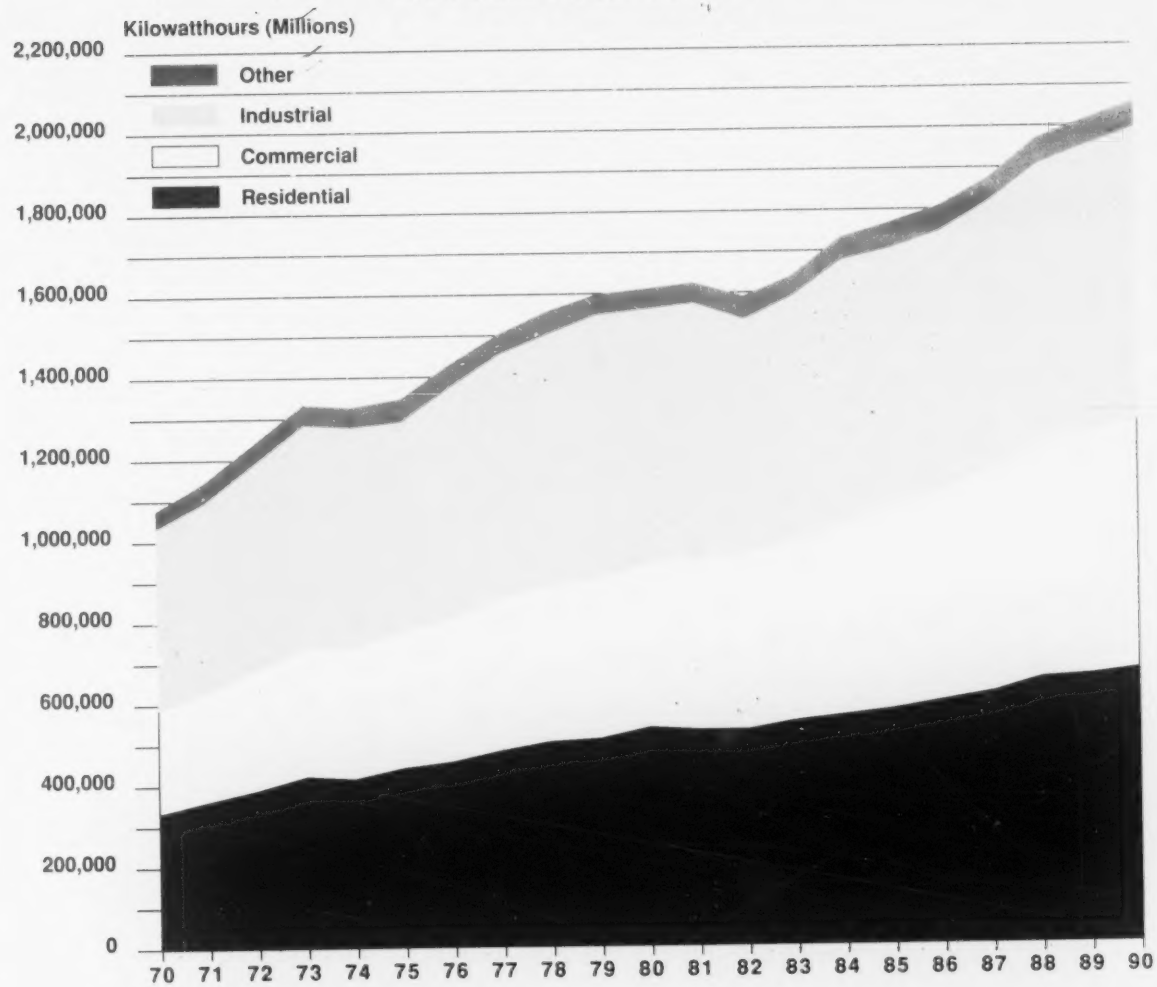
SECTION VI

ENERGY SALES

CHART VI-A

ENERGY SALES TO ULTIMATE CUSTOMERS

INVESTOR-OWNED ELECTRIC UTILITIES



Based on Table 39, page 43

TABLE 38

ENERGY SALES — TOTAL ELECTRIC UTILITY INDUSTRY

BY YEAR AND CLASS OF SERVICE
KILOWATTHOURS IN MILLIONS

Year	Total Sales	Exports to Canada and Mexico	Total Sales to Ultimate Customers	Residential	Commercial*	Industrial*	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Interdepartmental
1990p	**2,687,830**	**20,526**	**2,667,304**	**910,296**	**734,584**	**926,161**	**14,883**	**72,394**	**5,297**	**3,689**
1989r	2,636,138	15,135	2,621,003	898,802	715,915	912,772	14,570	69,334	5,294	4,316
1988	2,561,228	7,067	2,554,161	886,070	697,832	881,790	14,609	64,560	5,078	4,222
1987	2,441,364	5,881	2,435,483	846,457	658,445	843,709	14,386	63,047	4,898	4,541
1986	2,359,560	4,816	2,354,744	820,015	628,965	818,982	15,037	61,888	4,689	5,167
1985	2,310,847	4,965	2,305,882	792,875	605,865	820,301	14,644	62,165	4,704	5,328
1984	2,283,143	2,558	2,280,585	782,608	578,083	835,486	14,205	59,894	4,483	5,826
1983	2,163,124	3,337	2,159,787	750,293	545,601	782,984	13,944	57,267	4,300	5,398
1982	2,103,281	3,540	2,099,741	732,678	516,959	770,398	14,236	55,745	4,288	5,438
1981	2,152,506	1,832	2,150,674	730,479	521,698	819,641	14,683	53,737	4,206	6,230
1980	2,130,190	4,096	2,126,094	734,411	524,122	793,812	14,832	48,284	4,275	6,358
1979	2,086,582	2,182	2,084,400	695,996	494,723	817,617	14,792	49,604	4,256	7,412
1978	2,020,004	2,186	2,017,818	679,156	480,748	782,141	14,803	49,509	4,336	7,125
1977	1,953,535	2,744	1,950,791	652,345	469,227	757,168	14,418	46,242	4,212	7,179
1976	1,852,003	2,378	1,849,625	613,072	440,625	725,169	14,413	45,625	4,338	6,383
1975	1,738,107	5,083	1,733,024	586,149	418,069	661,558	13,907	43,625	4,273	5,443
1974	1,703,495	2,726	1,700,769	554,960	392,716	689,435	13,313	40,721	4,258	5,366
1973	1,705,773	2,570	1,703,203	554,171	396,903	687,235	12,836	42,340	4,186	5,532
1972	1,580,466	2,752	1,577,714	511,423	361,859	639,467	12,193	43,190	4,440	5,142
1971	1,469,955	3,514	1,466,441	479,080	333,752	592,700	11,673	39,819	4,537	4,880
1970	1,395,568	4,209	1,391,359	447,795	312,750	572,522	11,183	37,816	4,633	4,660

Note: Total may not equal sum of components due to independent rounding.
** Commercial and Industrial are not wholly comparable on a year-to-year basis due to changes from one classification to another.*
p Preliminary. r Revised.

TABLE 39

ENERGY SALES — INVESTOR-OWNED ELECTRIC UTILITIES

BY YEAR AND CLASS OF SERVICE
KILOWATTHOURS IN MILLIONS

Year	Total Sales	Sales for Resale†	Total Sales to Ultimate Customers	Residential	Commercial*	Industrial*	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Interdepartmental
1990p	**2,169,390**	**108,717**	**2,060,673**	**667,528**	**610,395**	**717,339**	**10,454**	**51,043**	**2,485**	**1,430**
1989r	2,129,953	108,601	2,021,352	657,956	593,020	707,108	10,441	48,433	2,482	1,913
1988	2,078,543	109,468	1,969,075	648,522	575,617	685,836	10,399	44,415	2,399	1,887
1987	1,986,233	106,675	1,879,558	618,496	544,616	658,417	10,395	43,195	2,239	2,200
1986	1,913,682	105,621	1,808,061	594,019	518,639	637,116	10,348	42,948	2,261	2,729
1985	1,871,702	102,773	1,768,929	573,253	498,320	638,513	10,339	43,565	2,252	2,687
1984	1,841,195	104,168	1,737,027	563,703	473,470	643,466	10,379	40,760	2,045	3,204
1983	1,749,915	109,540	1,640,375	546,080	445,300	597,405	10,445	36,396	1,929	2,820
1982	1,701,020	109,796	1,591,224	530,713	431,598	576,380	10,716	36,967	1,924	2,925
1981	1,745,234	116,248	1,628,986	527,119	420,014	628,481	10,918	37,623	1,939	2,892
1980	1,732,553	118,745	1,613,808	532,025	408,265	623,472	10,820	34,449	2,156	2,621
1979	1,719,640	117,408	1,602,232	509,655	394,511	648,031	10,854	34,165	2,103	2,913
1978	1,675,477	118,716	1,556,761	501,409	384,726	620,470	11,042	34,386	2,085	2,643
1977	1,619,820	115,409	1,504,411	481,167	375,903	598,042	10,912	33,208	2,450	2,729
1976	1,530,286	99,496	1,430,790	453,774	355,555	569,134	11,276	34,810	3,930	2,311
1975	1,447,147	101,273	1,345,874	439,496	340,082	515,798	10,868	33,528	4,158	1,944
1974	1,418,958	93,201	1,325,757	416,333	319,706	542,234	10,409	30,876	4,161	2,038
1973	1,417,386	82,990	1,334,396	416,851	323,018	545,912	10,034	32,452	4,086	2,043
1972	1,316,379	76,572	1,239,807	386,561	297,028	507,080	9,581	33,491	4,333	1,733
1971	1,215,614	70,009	1,145,605	358,564	272,703	468,512	9,206	30,618	4,424	1,578
1970	1,142,777	63,032	1,079,745	333,895	254,684	447,664	8,814	28,721	4,520	1,447

Note: Total may not equal sum of components due to independent rounding.
† To non-investor-owned electric utilities and exports.
** Commercial and Industrial are not wholly comparable on a year-to-year basis due to changes from one classification to another.*
p Preliminary. r Revised.

TABLE 40

ENERGY SALES IN PERCENT OF TOTAL TOTAL ELECTRIC UTILITY INDUSTRY

BY YEAR AND CLASS OF SERVICE

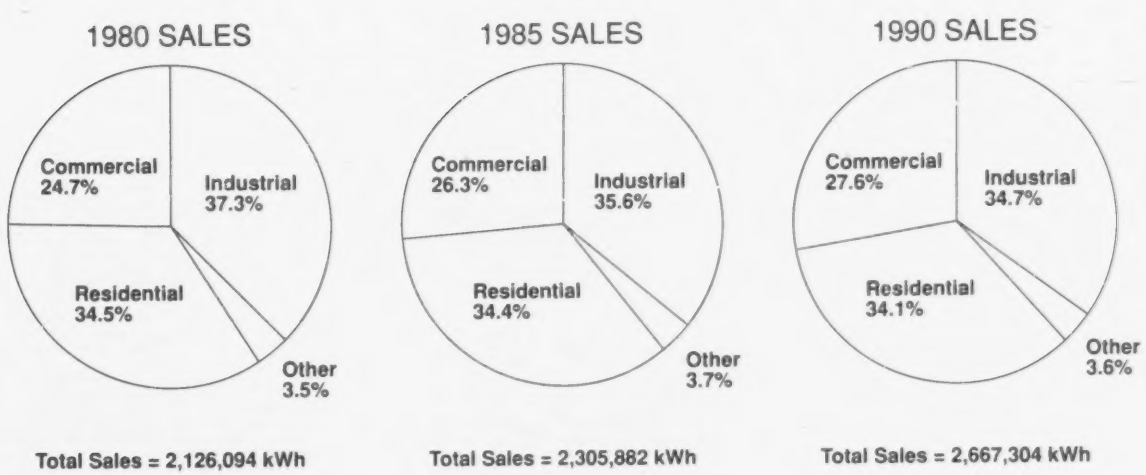
Year	Residential	Commercial	Industrial	Street & Highway Lighting	Other Public Authorities	Railroads and Railways	Inter-departmental
1990p	**34.1%**	**27.6%**	**34.7%**	**0.6%**	**2.7%**	**0.2%**	**0.1%**
1989r	34.3	27.3	34.8	0.6	2.6	0.2	0.2
1988	34.7	27.3	34.5	0.6	2.5	0.2	0.2
1987	34.8	27.0	34.6	0.6	2.6	0.2	0.2
1986	34.8	26.7	34.8	0.6	2.7	0.2	0.2
1985	34.4	26.3	35.6	0.6	2.7	0.2	0.2
1984	34.3	25.4	36.6	0.6	2.6	0.2	0.3
1983	34.7	25.3	36.3	0.6	2.7	0.2	0.2
1982	34.9	24.6	36.7	0.7	2.7	0.2	0.2
1981	34.0	24.2	38.1	0.7	2.5	0.2	0.3
1980	34.5	24.7	37.3	0.7	2.3	0.2	0.3
1979	33.4	23.7	39.2	0.7	2.4	0.2	0.4
1978	33.7	23.8	38.8	0.7	2.4	0.2	0.4
1977	33.4	24.1	38.8	0.7	2.4	0.2	0.4
1976	33.2	23.8	39.2	0.8	2.5	0.2	0.3
1975	33.8	24.1	38.2	0.8	2.5	0.3	0.3
1974	32.6	23.1	40.5	0.8	2.4	0.3	0.3
1973	32.5	23.3	40.4	0.8	2.5	0.2	0.3
1972	32.4	23.0	40.5	0.8	2.7	0.3	0.3
1971	32.7	22.8	40.4	0.8	2.7	0.3	0.3
1970	32.2	22.5	41.2	0.8	2.7	0.3	0.3

Based on sales data in Table 38. p Preliminary. r Revised.

CHART VI-B

ENERGY SALES

TOTAL ELECTRIC UTILITY INDUSTRY
BY YEAR AND CLASS OF SERVICE
KILOWATTHOURS IN MILLIONS



Total Sales = 2,126,094 kWh **Total Sales = 2,305,882 kWh** **Total Sales = 2,667,304 kWh**

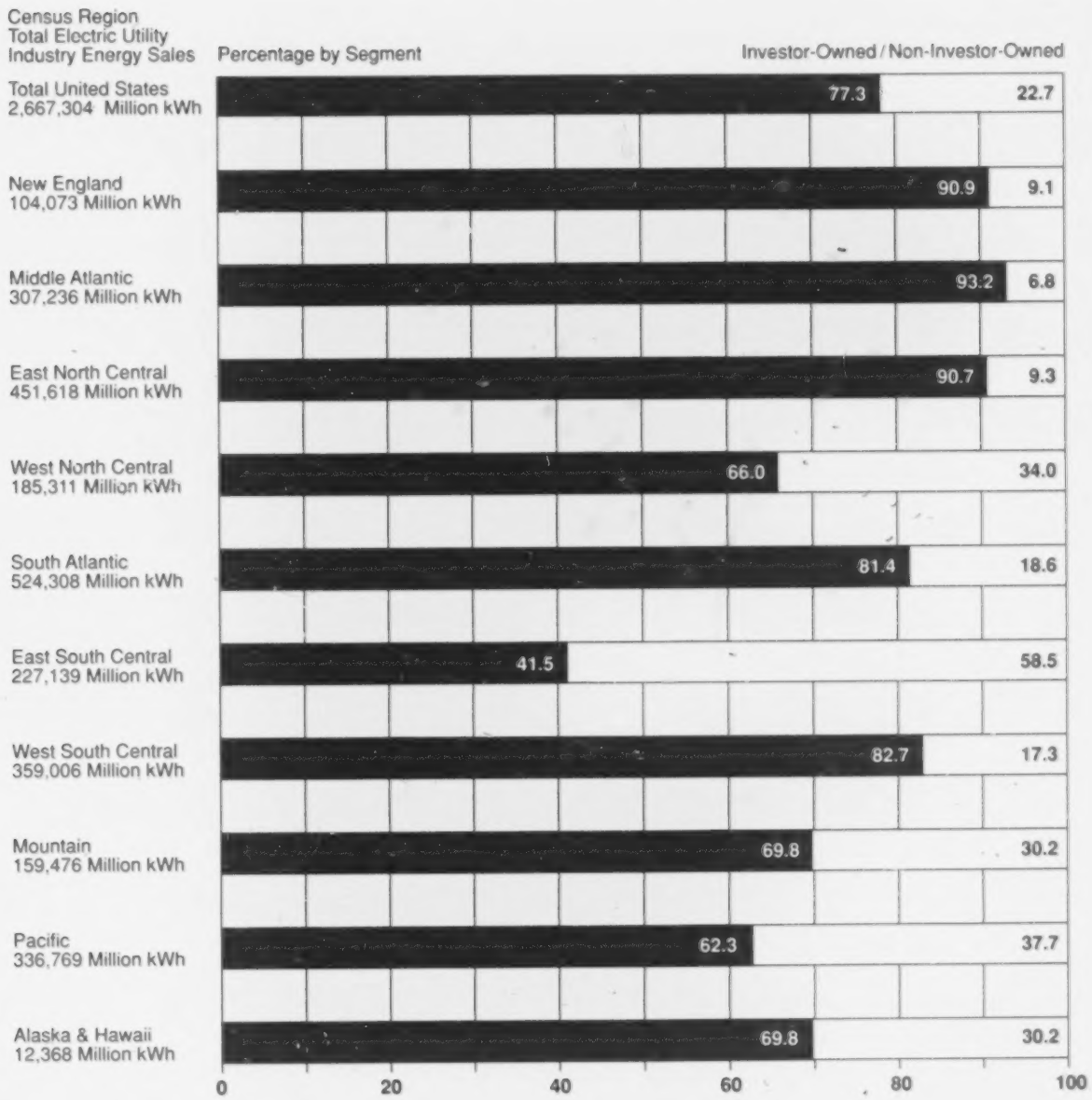
Based on Table 40, as shown above.

CHART VI-C

ENERGY SALES TO ULTIMATE CUSTOMERS

BY INVESTOR-OWNED AND NON-INVESTOR-OWNED ELECTRIC UTILITIES

1990p



p Preliminary

Based on Table 41A, page 46 and Table 42A, page 48

TABLE 41A

ENERGY SALES
TOTAL ELECTRIC UTILITY INDUSTRY

BY STATE AND CLASS OF SERVICE
YEAR 1990p — KILOWATTHOURS IN MILLIONS

State/Division	Total to Ultimate Customers	Residential	Commercial	Industrial	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Inter-departmental
Total United States	**2,667,304**	**910,296**	**734,584**	**926,161**	**14,883**	**72,394**	**5,297**	**3,689**
Maine	11,523	3,928	2,672	4,749	55	117	—	1
New Hampshire	8,648	3,449	2,003	3,089	38	68	—	—
Vermont	4,931	2,011	1,493	1,387	21	18	—	*
Massachusetts	45,399	15,550	18,534	10,206	377	588	143	—
Rhode Island	6,419	2,376	2,455	1,391	76	120	—	—
Connecticut	27,155	10,380	10,344	6,071	189	29	137	5
New England	**104,073**	**37,693**	**37,502**	**26,894**	**756**	**941**	**281**	**6**
New York	129,249	38,609	46,786	32,033	1,085	7,933	2,768	35
New Jersey	63,251	20,624	26,849	15,297	455	—	5	20
Pennsylvania	114,736	38,154	29,114	46,017	489	141	744	76
Middle Atlantic	**307,236**	**97,388**	**102,749**	**93,347**	**2,030**	**8,074**	**3,517**	**131**
Ohio	141,486	37,834	30,217	69,051	684	3,643	45	13
Indiana	68,283	21,836	15,261	30,552	320	262	12	39
Illinois	110,999	32,549	30,566	40,139	759	6,574	408	3
Michigan	82,066	25,327	20,555	34,927	493	720	—	45
Wisconsin	48,784	16,184	13,250	18,649	369	241	—	91
East North Central	**451,618**	**133,730**	**109,850**	**193,319**	**2,624**	**11,440**	**465**	**190**
Minnesota	46,808	14,857	7,706	23,603	204	428	—	11
Iowa	29,250	10,448	6,491	11,554	186	570	—	1
Missouri	51,563	21,001	13,252	11,392	264	635	7	13
North Dakota	6,921	2,990	1,896	1,539	99	394	—	3
South Dakota	6,385	2,904	1,565	1,576	74	266	—	*
Nebraska	17,596	6,740	5,548	4,532	134	600	—	42
Kansas	26,787	9,354	9,374	7,729	168	161	—	1
West North Central	**185,311**	**68,295**	**50,832**	**61,924**	**1,129**	**3,054**	**7**	**70**
Delaware	8,235	2,638	2,289	3,268	36	1	—	3
Maryland	49,522	19,121	10,383	19,349	352	13	216	88
District of Columbia	9,848	1,480	5,073	2,976	97	—	221	—
Virginia	72,329	28,045	20,246	16,182	300	7,558	—	—
West Virginia	23,108	7,562	4,979	10,478	70	19	—	—
North Carolina	87,684	33,007	23,416	29,480	361	1,370	—	51
South Carolina	54,410	17,911	11,640	24,138	123	583	—	13
Georgia	79,203	29,259	21,960	27,069	428	338	149	—
Florida	139,968	69,015	49,516	16,944	580	3,693	82	139
South Atlantic	**524,308**	**208,038**	**149,500**	**149,884**	**2,350**	**13,574**	**669**	**294**
Kentucky	60,717	16,831	9,002	22,672	238	11,934	—	40
Tennessee	75,504	28,964	6,277	39,713	399	55	—	96
Alabama	59,285	20,540	10,391	27,897	387	29	—	41
Mississippi	31,633	11,971	6,377	12,789	162	331	—	3
East South Central	**227,139**	**78,305**	**32,047**	**103,071**	**1,186**	**12,350**	**—**	**180**
Arkansas	26,988	10,524	6,145	9,812	118	390	—	—
Louisiana	62,829	20,754	12,877	26,543	291	1,751	—	613
Oklahoma	37,646	14,625	10,239	10,792	103	1,887	—	—
Texas	231,542	79,579	60,952	83,222	939	6,646	—	204
West South Central	**359,006**	**125,482**	**90,213**	**130,369**	**1,450**	**10,674**	**—**	**817**
Montana	12,866	3,384	2,896	6,386	57	125	—	19
Idaho	17,893	5,587	5,097	7,144	30	35	—	*
Wyoming	11,920	1,756	2,248	7,825	31	59	—	*
Colorado	30,129	9,747	13,653	6,198	204	327	—	—
New Mexico	13,437	3,543	4,701	4,323	79	753	—	40
Arizona	41,220	15,343	14,280	9,851	301	1,163	27	255
Utah	15,866	4,243	4,747	6,174	45	657	—	1
Nevada	16,144	5,514	3,963	6,113	92	461	—	—
Mountain	**159,476**	**49,117**	**51,584**	**54,014**	**840**	**3,580**	**27**	**315**
Washington	85,553	27,311	17,614	37,678	890	1,998	21	41
Oregon	41,044	14,537	11,370	14,850	141	81	—	66
California	210,172	66,474	77,210	56,632	1,380	6,589	311	1,576
Pacific	**336,769**	**108,322**	**106,193**	**109,159**	**2,411**	**8,668**	**332**	**1,683**
Alaska	4,057	1,604	1,920	443	48	39	—	3
Hawaii	8,311	2,321	2,194	3,737	58	—	—	—
Alaska & Hawaii	**12,368**	**3,925**	**4,114**	**4,180**	**107**	**39**	**—**	**3**

Note: Total may not equal sum of components due to independent rounding.
p Preliminary.
** Less than five hundred thousand kilowatthours.*

TABLE 41B

ENERGY SALES
TOTAL ELECTRIC UTILITY INDUSTRY

BY STATE AND CLASS OF SERVICE
YEAR 1989r -- KILOWATTHOURS IN MILLIONS

State/Division	Total to Ultimate Customers	Residential	Commercial	Industrial	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Inter-departmental
Total United States	**2,621,003**	**898,802**	**715,915**	**912,772**	**14,570**	**69,334**	**5,294**	**4,316**
Maine	11,446	4,013	2,644	4,611	59	118	—	1
New Hampshire	8,744	3,548	2,014	3,079	38	65	—	—
Vermont	4,974	2,064	1,497	1,369	20	23	—	*
Massachusetts	45,629	15,938	18,216	10,369	391	588	127	—
Rhode Island	6,359	2,370	2,400	1,399	75	115	—	—
Connecticut	27,343	10,483	10,277	6,216	191	30	134	11
New England	**104,495**	**38,416**	**37,048**	**27,042**	**775**	**940**	**261**	**12**
New York	128,693	38,408	46,988	31,550	1,083	7,876	2,756	33
New Jersey	63,751	20,809	26,491	15,970	452	—	6	23
Pennsylvania	113,899	38,150	28,338	45,939	517	118	762	75
Middle Atlantic	**306,344**	**97,368**	**101,816**	**93,458**	**2,053**	**7,994**	**3,524**	**131**
Ohio	141,457	38,794	29,742	68,446	679	3,737	49	11
Indiana	67,276	21,026	15,121	29,492	323	264	13	38
Illinois	109,085	32,158	29,857	39,489	739	6,417	422	2
Michigan	82,883	25,345	20,186	36,099	484	721	—	48
Wisconsin	48,216	16,064	13,004	18,414	373	267	—	94
East North Central	**448,918**	**134,386**	**107,910**	**191,940**	**2,597**	**11,406**	**484**	**194**
Minnesota	45,897	14,807	7,539	22,876	201	462	—	12
Iowa	28,636	10,346	6,266	11,248	192	584	—	1
Missouri	50,621	20,607	17,858	11,252	264	620	8	14
North Dakota	6,868	3,039	1,608	1,752	99	369	—	3
South Dakota	6,332	2,911	1,767	1,264	74	316	—	*
Nebraska	17,357	6,667	5,549	4,363	133	589	—	54
Kansas	25,787	8,901	9,030	7,520	172	162	—	1
West North Central	**181,498**	**67,278**	**49,616**	**60,274**	**1,135**	**3,103**	**8**	**84**
Delaware	8,039	2,621	2,231	3,147	35	1	—	3
Maryland	49,255	19,067	10,007	19,529	349	13	211	79
District of Columbia	9,653	1,466	4,945	2,930	97	—	215	—
Virginia	73,293	29,208	19,982	16,288	288	7,527	—	—
West Virginia	22,829	7,619	4,913	10,207	70	19	—	—
North Carolina	86,423	32,790	22,458	29,409	351	1,363	—	52
South Carolina	53,630	17,481	11,196	24,250	123	568	—	11
Georgia	77,192	28,527	21,105	26,661	414	336	149	—
Florida	135,799	66,605	47,809	17,039	565	3,548	80	153
South Atlantic	**516,112**	**205,384**	**144,645**	**149,459**	**2,294**	**13,376**	**655**	**300**
Kentucky	58,487	16,944	8,804	22,535	236	9,927	—	42
Tennessee	73,628	28,554	6,023	38,520	401	54	—	76
Alabama	57,949	19,747	9,999	27,756	382	27	—	38
Mississippi	29,675	11,515	6,166	11,506	161	323	—	3
East South Central	**219,740**	**76,760**	**30,992**	**100,317**	**1,180**	**10,332**	**—**	**159**
Arkansas	26,308	10,148	5,937	9,700	115	408	—	—
Louisiana	61,179	20,037	12,560	25,511	288	1,705	—	1,079
Oklahoma	36,280	13,978	9,937	10,442	114	1,807	—	—
Texas	224,754	77,139	59,093	80,980	943	6,401	—	198
West South Central	**348,520**	**121,303**	**87,527**	**126,633**	**1,461**	**10,321**	**—**	**1,276**
Montana	12,771	3,438	2,820	6,310	61	116	—	25
Idaho	17,741	5,655	4,875	7,146	30	35	—	*
Wyoming	11,518	1,755	2,188	7,470	32	60	—	13
Colorado	29,496	9,598	13,261	6,165	202	213	—	58
New Mexico	13,132	3,467	4,615	4,206	75	727	—	42
Arizona	40,460	15,232	13,620	9,899	296	1,233	27	153
Utah	15,569	4,161	4,638	6,037	44	688	—	1
Nevada	14,868	5,161	3,758	5,446	91	411	—	1
Mountain	**155,555**	**48,467**	**49,774**	**52,678**	**832**	**3,484**	**27**	**292**
Washington	84,061	27,096	17,188	37,069	598	2,043	20	47
Oregon	39,561	14,225	11,231	13,840	141	81	—	44
California	204,193	64,275	74,173	56,037	1,403	6,216	315	1,773
Pacific	**327,815**	**105,596**	**102,592**	**106,947**	**2,141**	**8,340**	**335**	**1,865**
Alaska	4,037	1,606	1,897	445	48	38	—	2
Hawaii	7,970	2,239	2,098	3,580	54	—	—	—
Alaska & Hawaii	**12,007**	**3,845**	**3,995**	**4,024**	**102**	**38**	**—**	**2**

Note: Total may not equal sum of components due to independent rounding.
r Revised.
** Less than five hundred thousand kilowatthours.*

TABLE 42A

ENERGY SALES
INVESTOR-OWNED ELECTRIC UTILITIES

BY STATE AND CLASS OF SERVICE

YEAR 1990p — KILOWATTHOURS IN MILLIONS

State/Division	Total to Ultimate Customers	Residential	Commercial	Industrial	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Inter-departmental
Total United States	**2,060,673**	**667,528**	**610,395**	**717,339**	**10,454**	**51,043**	**2,485**	**1,430**
Maine	11,220	3,783	2,620	4,654	52	112	—	—
New Hampshire	7,918	3,015	1,791	3,009	36	68	—	—
Vermont	4,014	1,574	1,375	1,044	15	7	—	—
Massachusetts	39,505	13,410	17,298	7,980	324	349	143	—
Rhode Island	6,387	2,357	2,451	1,384	76	120	—	—
Connecticut	25,596	9,952	9,977	5,350	180	—	137	—
New England	**94,641**	**34,091**	**35,511**	**23,420**	**682**	**656**	**281**	**—**
New York	112,591	37,072	46,202	25,694	595	2,947	47	35
New Jersey	61,964	20,108	26,569	14,821	441	—	5	20
Pennsylvania	111,923	36,339	28,585	45,584	468	126	744	76
Middle Atlantic	**286,479**	**93,519**	**101,356**	**86,099**	**1,504**	**3,073**	**796**	**131**
Ohio	131,502	32,880	28,426	66,033	633	3,471	45	13
Indiana	57,947	16,189	13,637	27,642	265	164	12	39
Illinois	104,134	29,001	28,568	39,049	736	6,370	408	3
Michigan	74,492	22,594	18,122	32,712	425	595	—	44
Wisconsin	41,485	13,018	11,635	16,279	319	200	—	35
East North Central	**409,561**	**113,681**	**100,388**	**181,715**	**2,378**	**10,800**	**465**	**133**
Minnesota	34,054	7,708	4,980	20,959	153	243	—	11
Iowa	22,687	6,793	5,610	9,756	165	362	—	1
Missouri	38,677	13,897	14,962	9,262	215	338	—	2
North Dakota	3,789	1,537	1,080	1,057	48	65	—	3
South Dakota	3,488	1,217	969	1,249	28	26	—	*
Nebraska	—	—	—	—	—	—	—	—
Kansas	19,574	6,703	6,879	5,832	139	21	—	1
West North Central	**122,268**	**37,855**	**34,480**	**48,115**	**747**	**1,054**	**—**	**17**
Delaware	6,744	1,923	1,989	2,798	31	—	—	3
Maryland	46,628	17,422	9,674	18,994	235	—	216	88
District of Columbia	9,848	1,480	5,073	2,976	97	—	221	—
Virginia	64,147	23,642	18,998	13,797	275	7,434	—	—
West Virginia	23,017	7,508	4,958	10,463	70	18	—	—
North Carolina	68,938	22,615	18,991	25,992	252	1,082	—	7
South Carolina	38,391	11,009	8,866	17,910	96	498	—	13
Georgia	56,778	15,955	17,520	22,771	295	88	149	—
Florida	112,469	54,899	41,047	12,578	415	3,308	82	139
South Atlantic	**426,960**	**156,452**	**127,115**	**128,280**	**1,766**	**12,429**	**669**	**250**
Kentucky	38,219	9,303	7,019	9,846	145	11,905	—	1
Tennessee	1,580	548	285	711	5	31	—	—
Alabama	38,082	11,997	8,202	17,713	167	—	—	3
Mississippi	16,306	5,506	4,520	5,875	102	299	—	3
East South Central	**94,187**	**27,354**	**20,026**	**34,145**	**420**	**12,235**	**—**	**7**
Arkansas	18,794	6,423	4,728	7,200	94	350	—	—
Louisiana	55,633	16,306	11,689	25,062	289	1,673	—	613
Oklahoma	29,849	10,299	8,229	9,372	99	1,850	—	—
Texas	192,641	61,342	50,201	75,794	796	4,507	—	1
West South Central	**296,917**	**94,370**	**74,847**	**117,428**	**1,278**	**8,380**	**—**	**614**
Montana	7,982	2,227	2,291	3,329	45	74	—	15
Idaho	15,811	4,677	4,451	6,655	26	2	—	*
Wyoming	9,024	1,041	1,209	6,747	19	8	—	*
Colorado	19,745	5,770	10,378	3,370	146	81	—	—
New Mexico	9,946	2,657	3,264	3,354	67	578	—	25
Arizona	22,065	8,182	7,991	5,610	95	187	—	—
Utah	12,398	3,207	3,269	5,352	43	527	—	*
Nevada	14,314	5,229	3,632	4,922	91	441	—	—
Mountain	**111,286**	**32,991**	**36,484**	**39,339**	**533**	**1,898**	**—**	**42**
Washington	25,527	12,198	8,127	5,098	90	*	—	14
Oregon	27,995	10,962	8,879	7,967	126	*	—	61
California	156,226	51,594	60,921	41,892	870	514	274	162
Pacific	**209,748**	**74,753**	**77,927**	**54,957**	**1,086**	**514**	**274**	**237**
Alaska	317	142	65	103	2	5	—	—
Hawaii	8,311	2,321	2,194	3,737	58	—	—	—
Alaska & Hawaii	**8,627**	**2,463**	**2,259**	**3,840**	**60**	**5**	**—**	**—**

Note: Total may not equal sum of components due to independent rounding.

p Preliminary.

** Less than five hundred thousand kilowatthours.*

TABLE 42B

ENERGY SALES
INVESTOR-OWNED ELECTRIC UTILITIES

BY STATE AND CLASS OF SERVICE

YEAR 1989r — KILOWATTHOURS IN MILLIONS

State/Division	Total to Ultimate Customers	Residential	Commercial	Industrial	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Inter-departmental
Total United States	**2,021,352**	**657,956**	**593,020**	**707,108**	**10,441**	**48,433**	**2,482**	**1,913**
Maine	11,139	3,861	2,591	4,517	56	113	—	—
New Hampshire	8,005	3,104	1,800	3,000	35	65	—	—
Vermont	4,075	1,641	1,383	1,030	15	6	—	—
Massachusetts	39,764	13,784	16,989	8,176	333	356	127	—
Rhode Island	6,328	2,351	2,396	1,391	75	115	—	—
Connecticut	25,794	10,066	9,924	5,487	182	—	134	—
New England	**95,105**	**34,807**	**35,084**	**23,601**	**697**	**655**	**261**	**—**
New York	112,049	36,876	46,409	25,215	593	2,888	35	33
New Jersey	62,466	20,291	26,210	15,497	439	—	6	23
Pennsylvania	111,086	36,335	27,809	45,506	496	103	762	75
Middle Atlantic	**285,601**	**93,503**	**100,426**	**86,218**	**1,528**	**2,991**	**804**	**131**
Ohio	131,474	33,840	27,951	65,428	628	3,565	49	11
Indiana	56,951	16,386	13,498	26,580	268	167	13	38
Illinois	102,241	28,609	27,877	38,400	716	6,214	422	2
Michigan	75,279	22,618	17,773	33,827	417	595	—	48
Wisconsin	40,933	12,899	11,389	16,059	322	226	—	38
East North Central	**406,877**	**114,353**	**98,488**	**180,294**	**2,352**	**10,767**	**484**	**138**
Minnesota	33,142	7,658	4,814	20,232	150	276	—	12
Iowa	22,072	6,691	5,385	9,450	170	375	—	1
Missouri	37,884	13,557	14,680	9,104	216	325	—	2
North Dakota	3,778	1,585	792	1,270	47	81	—	3
South Dakota	3,385	1,223	1,171	937	28	26	—	*
Nebraska	—	—	—	—	—	—	—	—
Kansas	18,620	6,266	6,547	5,641	143	21	—	1
West North Central	**118,880**	**36,980**	**33,389**	**46,633**	**754**	**1,105**	**—**	**18**
Delaware	6,547	1,906	1,931	2,677	30	—	—	3
Maryland	46,362	17,368	9,298	19,174	232	—	211	79
District of Columbia	9,653	1,466	4,945	2,930	97	—	215	—
Virginia	65,143	24,815	18,747	13,911	264	7,406	—	—
West Virginia	22,737	7,565	4,893	10,191	70	18	—	—
North Carolina	67,739	22,382	18,052	25,980	244	1,075	—	6
South Carolina	37,610	10,578	8,422	18,022	93	484	—	11
Georgia	54,805	15,244	16,683	22,362	281	86	149	—
Florida	108,942	52,812	39,534	12,795	402	3,165	80	153
South Atlantic	**419,539**	**154,136**	**122,505**	**128,042**	**1,713**	**12,234**	**655**	**254**
Kentucky	35,794	9,413	6,855	9,485	143	9,898	—	1
Tennessee	1,591	567	285	702	5	32	—	—
Alabama	36,790	11,347	7,916	17,361	163	—	—	4
Mississippi	15,527	5,193	4,365	5,572	102	291	—	3
East South Central	**89,702**	**26,520**	**19,421**	**33,120**	**413**	**10,221**	**—**	**7**
Arkansas	18,113	6,047	4,519	7,088	91	368	—	—
Louisiana	53,983	15,590	11,372	24,030	286	1,627	—	1,079
Oklahoma	28,482	9,652	7,927	9,022	111	1,770	—	—
Texas	186,295	58,990	48,520	73,711	800	4,273	—	1
West South Central	**286,873**	**90,279**	**72,338**	**113,851**	**1,288**	**8,037**	**—**	**1,079**
Montana	7,961	2,281	2,215	3,321	50	75	—	19
Idaho	15,659	4,745	4,229	6,657	25	2	—	*
Wyoming	8,621	1,040	1,149	6,392	19	8	—	13
Colorado	19,201	5,629	9,994	3,352	144	82	—	—
New Mexico	9,688	2,582	3,179	3,237	64	600	—	26
Arizona	21,621	8,072	7,470	5,797	94	188	—	—
Utah	12,128	3,126	3,160	5,215	42	586	—	*
Nevada	13,075	4,875	3,425	4,296	90	388	—	—
Mountain	**107,955**	**32,350**	**34,819**	**38,267**	**529**	**1,930**	**—**	**60**
Washington	24,864	11,993	7,984	4,778	89	*	—	21
Oregon	27,158	10,697	8,761	7,535	125	*	—	40
California	150,513	49,958	57,642	41,083	898	488	278	165
Pacific	**202,535**	**72,648**	**74,387**	**53,396**	**1,112**	**488**	**278**	**225**
Alaska	314	141	62	104	1	4	—	—
Hawaii	7,970	2,239	2,098	3,580	54	—	—	—
Alaska & Hawaii	**8,284**	**2,380**	**2,160**	**3,684**	**55**	**4**	**—**	**—**

Note: Total may not equal sum of components due to independent rounding.

r Revised.

* Less than five hundred thousand kilowatthours.

TABLE 43

ENERGY SALES
TOTAL ELECTRIC UTILITY INDUSTRY

BY QUARTER AND CLASS OF SERVICE
1985 - 1990 — KILOWATTHOURS IN MILLIONS

Year — Quarter	Total to Ultimate Customers	Residential	Commercial	Industrial	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Inter-departmental
YEAR — 1990p								
First Quarter	656,085	236,769	173,262	221,522	3,892	18,308	1,384	948
Second Quarter	630,178	199,037	176,372	231,242	3,384	17,894	1,270	980
Third Quarter	736,620	262,957	207,013	242,470	3,581	18,405	1,293	902
Fourth Quarter	644,421	211,532	177,938	230,926	4,027	17,788	1,351	859
Total	**2,667,304**	**910,296**	**734,584**	**926,161**	**14,883**	**72,394**	**5,297**	**3,689**
YEAR — 1989r								
First Quarter	651,338	238,889	169,939	219,864	3,734	16,512	1,385	1,015
Second Quarter	618,719	195,750	172,352	228,485	3,349	16,439	1,251	1,092
Third Quarter	708,356	249,242	198,672	236,177	3,547	18,219	1,291	1,208
Fourth Quarter	642,590	214,921	174,952	228,245	3,939	18,164	1,368	1,001
Total	**2,621,003**	**898,802**	**715,915**	**912,772**	**14,570**	**69,334**	**5,294**	**4,316**
YEAR — 1988								
First Quarter	639,556	239,079	166,908	211,725	3,730	15,877	1,328	910
Second Quarter	590,981	186,056	165,021	218,766	3,462	15,475	1,202	998
Third Quarter	707,865	256,882	198,132	229,886	3,516	17,069	1,262	1,118
Fourth Quarter	615,760	204,053	167,771	221,413	3,901	16,139	1,286	1,196
Total	**2,554,161**	**886,070**	**697,832**	**881,790**	**14,609**	**64,560**	**5,078**	**4,222**
YEAR — 1987								
First Quarter	596,074	222,024	154,347	198,342	3,736	15,174	1,317	1,132
Second Quarter	577,204	186,784	158,928	210,166	3,462	15,473	1,156	1,235
Third Quarter	674,355	243,735	186,437	221,563	3,427	16,885	1,185	1,124
Fourth Quarter	587,849	193,914	158,733	213,638	3,760	15,515	1,240	1,048
Total	**2,435,483**	**846,457**	**658,445**	**843,709**	**14,386**	**63,047**	**4,898**	**4,541**
YEAR — 1986								
First Quarter	589,664	219,324	149,107	199,433	3,887	15,378	1,255	1,280
Second Quarter	550,583	175,028	150,349	204,504	3,468	14,940	1,101	1,193
Third Quarter	638,346	229,897	175,803	210,250	3,639	16,228	1,129	1,399
Fourth Quarter	576,151	195,766	153,706	204,795	4,043	15,341	1,205	1,294
Total	**2,354,744**	**820,015**	**628,965**	**818,982**	**15,037**	**61,888**	**4,689**	**5,167**
YEAR — 1985								
First Quarter	586,992	219,633	144,927	200,734	3,835	15,249	1,261	1,354
Second Quarter	542,301	169,611	144,271	206,463	3,531	15,946	1,113	1,368
Third Quarter	617,375	216,280	168,097	211,362	3,411	15,739	1,127	1,358
Fourth Quarter	559,214	187,351	148,570	201,742	3,868	15,232	1,202	1,249
Total	**2,305,882**	**792,875**	**605,865**	**820,301**	**14,644**	**62,165**	**4,704**	**5,328**

Note: Total may not equal sum of components due to independent rounding.
p Preliminary. r Revised.

TABLE 44

ENERGY SALES
INVESTOR-OWNED ELECTRIC UTILITIES

BY QUARTER AND CLASS OF SERVICE
1985 - 1990 — KILOWATTHOURS IN MILLIONS

Year — Quarter	Total to Ultimate Customers	Residential	Commercial	Industrial	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Inter-departmental
YEAR — 1990p								
First Quarter	505,482	173,072	144,034	171,587	2,728	13,005	629	428
Second Quarter	488,632	146,440	146,611	179,316	2,451	12,790	608	417
Third Quarter	567,549	191,933	171,992	187,373	2,464	12,884	621	282
Fourth Quarter	499,010	156,083	147,758	179,063	2,811	12,364	628	304
Total	**2,060,673**	**667,528**	**610,395**	**717,339**	**10,454**	**51,043**	**2,485**	**1,430**
YEAR — 1989r								
First Quarter	500,975	174,022	140,844	170,949	2,732	11,360	627	441
Second Quarter	478,339	143,649	142,823	176,982	2,421	11,367	579	517
Third Quarter	545,558	181,940	164,699	182,425	2,482	12,818	625	569
Fourth Quarter	496,480	158,345	144,653	176,752	2,806	12,888	651	386
Total	**2,021,352**	**657,956**	**593,020**	**707,108**	**10,441**	**48,433**	**2,482**	**1,913**
YEAR — 1988								
First Quarter	490,791	173,877	137,619	164,673	2,728	10,930	604	360
Second Quarter	457,139	136,678	136,077	170,380	2,423	10,595	572	414
Third Quarter	545,694	187,959	163,804	178,470	2,474	11,861	624	502
Fourth Quarter	475,451	150,008	138,117	172,313	2,774	11,029	599	611
Total	**1,969,075**	**648,522**	**575,617**	**685,836**	**10,399**	**44,415**	**2,399**	**1,887**
YEAR — 1987								
First Quarter	458,492	161,532	127,538	155,143	2,757	10,346	582	595
Second Quarter	446,568	136,661	131,473	164,351	2,399	10,523	539	621
Third Quarter	520,148	177,744	154,383	172,644	2,463	11,831	555	528
Fourth Quarter	454,350	142,560	131,221	166,279	2,776	10,495	563	456
Total	**1,879,558**	**618,496**	**544,616**	**658,417**	**10,395**	**43,195**	**2,239**	**2,200**
YEAR — 1986								
First Quarter	451,114	158,240	122,675	155,507	2,768	10,634	592	699
Second Quarter	424,612	127,239	124,271	159,089	2,356	10,490	544	624
Third Quarter	488,815	165,646	145,051	162,995	2,494	11,330	551	749
Fourth Quarter	443,519	142,894	126,642	159,526	2,729	10,495	575	657
Total	**1,808,061**	**594,019**	**518,639**	**637,116**	**10,348**	**42,948**	**2,261**	**2,729**
YEAR — 1985								
First Quarter	446,638	157,530	119,021	155,471	2,766	10,547	594	710
Second Quarter	417,274	123,040	118,800	160,551	2,357	11,314	533	680
Third Quarter	474,423	156,403	138,465	164,672	2,485	11,140	548	710
Fourth Quarter	430,594	136,279	122,035	157,819	2,731	10,564	578	588
Total	**1,768,929**	**573,253**	**498,320**	**638,513**	**10,339**	**43,565**	**2,252**	**2,687**

Note: Total may not equal sum of components due to independent rounding.
p Preliminary. r Revised.

TABLE 45

AVERAGE ANNUAL KWH USE PER CUSTOMER

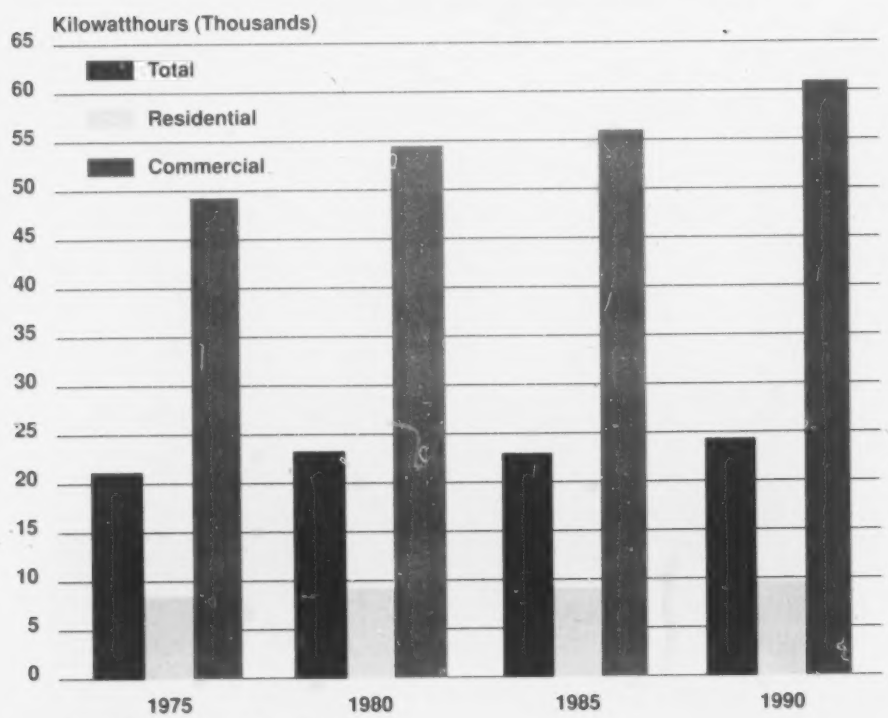
Year	TOTAL ELECTRIC UTILITY INDUSTRY				INVESTOR-OWNED ELECTRIC UTILITIES				
	Total Ultimate Customers	Residential	Commercial	Industrial	Total Ultimate Customers	Residential	Commercial	Industrial
1990p	**24,463**	**9,472**	**61,061**	**1,770,513**	**24,627**	**9,056**	**65,796**	**1,828,276**
1989r	24,359	9,470	60,576	1,793,286	24,543	9,063	65,212	1,868,875
1988	24,167	9,498	60,437	1,784,084	24,325	9,082	64,748	1,862,303
1987	23,472	9,236	58,409	1,719,914	23,653	8,816	62,801	1,813,586
1986	23,071	9,090	57,161	1,625,242	23,201	8,627	61,462	1,726,461
1985	22,903	8,906	56,109	1,598,675	23,149	8,487	60,517	1,699,809
1984	23,152	8,978	55,205	1,661,280	23,173	8,500	59,270	1,622,100
1983	22,479	8,814	53,822	1,567,077	22,293	8,379	57,003	1,534,956
1982	22,197	8,743	52,360	1,431,408	21,940	8,261	56,379	1,512,487
1981	23,026	8,825	53,402	1,669,211	22,753	8,311	55,742	N/A
1980	23,167	9,025	54,538	N/A	22,949	8,539	55,210	N/A
1979	23,481	8,843	53,197	N/A	23,287	8,360	54,594	N/A
1978	23,315	8,849	53,085	N/A	23,197	8,430	54,653	N/A
1977	23,052	8,693	52,892	N/A	22,938	8,279	54,520	N/A
1976	22,361	8,360	50,733	N/A	22,263	7,969	52,560	N/A
1975	21,417	8,176	48,964	N/A	21,305	7,855	50,966	N/A
1974	21,448	7,907	46,557	N/A	21,343	7,574	48,426	N/A
1973	21,955	8,079	47,580	N/A	21,989	7,769	49,550	N/A
1972	20,964	7,691	44,496	N/A	21,002	7,413	46,565	N/A
1971	19,956	7,380	41,943	N/A	19,917	7,062	43,596	N/A
1970	19,380	7,066	39,952	N/A	19,167	6,720	41,272	N/A

Based on sales data in Tables 38 and 39, and average number of customers per year. p Preliminary r Revised.
N/A Not Available.

CHART VI-D

AVERAGE KILOWATTHOURS USED

TOTAL ELECTRIC UTILITY INDUSTRY



Based on Table 45, as shown above.

SECTION VII
CUSTOMERS

TABLE 47
ULTIMATE CUSTOMERS
TOTAL ELECTRIC UTILITY INDUSTRY
BY YEAR AND CLASS OF SERVICE AT DECEMBER 31st

Year	Total Ultimate Customers	Residential	Commercial*	Industrial*	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Inter-departmental
1990p	**109,766,385**	**96,771,096**	**12,105,163**	**513,228**	**179,728**	**195,160**	**29**	**1,981**
1989r	108,468,242	95,616,026	11,976,449	506,597	176,215	190,954	28	1,973
1988	106,411,256	93,921,875	11,637,444	491,292	169,792	188,954	28	1,871
1987	104,624,233	92,399,323	11,386,008	487,572	165,188	184,369	27	1,746
1986	102,952,793	90,994,586	11,114,300	498,254	161,377	182,257	28	1,991
1985	101,579,271	89,819,726	10,920,861	499,728	158,307	178,759	28	1,862
1984	99,371,026	87,938,995	10,565,239	525,692	139,703	199,393	29	1,975
1983	96,985,531	85,842,195	10,266,449	500,215	153,659	219,879	31	3,103
1982	95,250,268	84,371,779	9,976,274	533,635	148,678	216,975	31	2,896
1981	94,011,299	83,304,355	9,847,260	516,996	141,051	197,187	31	4,419
1980	92,653,471	82,153,162	9,698,809	484,652	142,724	168,120	30	5,974
1979	89,771,985	79,620,180	9,386,572	477,874	124,228	158,098	30	5,003
1978	87,667,954	77,775,667	9,148,399	464,637	121,899	152,439	30	4,883
1977	85,590,212	75,923,145	8,943,732	448,009	120,594	149,934	28	4,770
1976	83,613,161	74,161,846	8,750,949	427,403	119,130	148,867	28	4,938
1975	81,844,890	72,570,187	8,591,108	414,665	116,555	147,387	29	4,959
1974	80,102,390	70,949,607	8,472,817	422,736	112,477	139,480	29	5,244
1973	78,461,251	69,438,429	8,361,847	413,383	108,787	133,619	46	5,140
1972	76,150,204	67,314,000	8,200,033	369,952	103,874	157,461	50	4,834
1971	74,265,071	65,650,046	8,002,572	355,967	96,252	155,414	48	4,772
1970	72,484,978	64,017,662	7,865,073	352,993	92,052	152,706	47	4,445

*Commercial and Industrial are not wholly comparable on a year-to-year basis due to changes from one classification to another.
p Preliminary. r Revised.

TABLE 48

ULTIMATE CUSTOMERS INVESTOR-OWNED ELECTRIC UTILITIES

BY YEAR AND CLASS OF SERVICE AT DECEMBER 31st

Year	Total Ultimate Customers	Residential	Commercial*	Industrial*	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Inter-departmental
1990p	**84,228,417**	**74,214,166**	**9,329,842**	**383,388**	**140,852**	**159,683**	**23**	**463**
1989r	83,029,027	73,177,333	9,181,076	376,790	137,579	155,770	22	457
1988	81,673,876	72,036,602	8,985,299	367,854	131,711	151,898	22	490
1987	80,232,499	70,826,711	8,768,207	360,468	127,644	149,022	21	426
1986	78,717,500	69,548,070	8,535,188	364,294	123,525	145,957	22	444
1985	77,203,821	68,234,704	8,340,862	363,757	121,395	142,621	22	460
1984	75,709,055	66,987,481	8,066,025	396,304	117,874	140,907	23	441
1983	74,247,765	65,718,130	7,886,857	387,875	115,170	139,233	23	477
1982	72,979,298	64,648,932	7,702,142	378,016	113,251	136,484	23	450
1981	72,037,264	63,820,699	7,579,344	389,646	112,061	135,049	23	442
1980	70,996,563	62,902,588	7,459,959	375,540	123,589	134,595	23	269
1979	69,581,540	61,676,402	7,290,125	372,407	108,149	134,171	23	263
1978	67,922,975	60,216,110	7,106,705	364,123	106,286	129,496	23	232
1977	66,294,706	58,770,646	6,942,201	349,563	105,442	126,611	21	222
1976	64,896,400	57,530,599	6,805,345	329,522	103,754	126,674	22	484
1975	63,650,468	56,409,122	6,690,374	322,429	101,937	126,100	23	483
1974	62,667,061	55,499,145	6,624,061	326,409	97,438	119,531	23	454
1973	61,435,986	54,370,297	6,531,953	324,236	94,682	114,315	24	479
1972	59,804,431	52,868,920	6,422,032	284,733	90,206	138,052	25	463
1971	58,204,164	51,415,155	6,294,907	274,329	86,714	132,573	25	461
1970	56,888,819	50,210,348	6,194,383	270,132	83,443	130,036	24	453

* *Commercial and Industrial are not wholly comparable on a year-to-year basis due to changes from one classification to another.*
p Preliminary. r Revised.

TABLE 49

CUSTOMERS IN PERCENT OF TOTAL TOTAL ELECTRIC UTILITY INDUSTRY

BY YEAR AND CLASS OF SERVICE AT DECEMBER 31st

Year	Residential	Commercial	Industrial	Street and Highway Lighting	Other Public Authorities	Railroads and Railways*	Inter-departmental*
1990p	**88.2%**	**10.9%**	**0.5%**	**0.2%**	**0.2%**	**0.0%**	**0.0%**
1989r	88.2	10.9	0.5	0.2	0.2	0.0	0.0
1988	88.2	10.9	0.5	0.2	0.2	0.0	0.0
1987	88.3	10.8	0.5	0.2	0.2	0.0	0.0
1986	88.3	10.8	0.5	0.2	0.2	0.0	0.0
1985	88.3	10.8	0.5	0.2	0.2	0.0	0.0
1984	88.5	10.6	0.5	0.2	0.2	0.0	0.0
1983	88.5	10.6	0.5	0.2	0.2	0.0	0.0
1982	88.6	10.5	0.6	0.1	0.2	0.0	0.0
1981	88.6	10.5	0.5	0.2	0.2	0.0	0.0
1980	88.7	10.5	0.5	0.1	0.2	0.0	0.0
1979	88.7	10.5	0.5	0.1	0.2	0.0	0.0
1978	88.7	10.5	0.5	0.1	0.2	0.0	0.0
1977	88.7	10.5	0.5	0.1	0.2	0.0	0.0
1976	88.7	10.5	0.5	0.1	0.2	0.0	0.0
1975	88.7	10.5	0.5	0.1	0.2	0.0	0.0
1974	88.6	10.6	0.5	0.1	0.2	0.0	0.0
1973	88.5	10.7	0.5	0.1	0.2	0.0	0.0
1972	88.4	10.8	0.5	0.1	0.2	0.0	0.0
1971	88.4	10.8	0.5	0.1	0.2	0.0	0.0
1970	88.3	10.9	0.5	0.1	0.2	0.0	0.0

* *Less than one-tenth of one percent. p Preliminary. r Revised.*
Based on customer data in Table 47.

TABLE 50A

ULTIMATE CUSTOMERS
TOTAL ELECTRIC UTILITY INDUSTRY

BY STATE AND CLASS OF SERVICE AT DECEMBER 31, 1990p

State/Division	Total Ultimate Customers	Residential	Commercial	Industrial	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Inter-departmental
Total United States	**109,766,385**	**96,771,096**	**12,105,163**	**513,228**	**179,728**	**195,160**	**29**	**1,981**
Maine	633,489	562,250	67,152	2,881	1,082	122	—	2
New Hampshire	558,253	483,495	72,026	1,620	669	443	—	—
Vermont	295,039	257,683	35,586	1,064	352	352	—	2
Massachusetts	2,633,266	2,324,290	288,466	12,451	5,176	2,882	1	—
Rhode Island	436,849	388,136	45,156	2,589	928	40	—	—
Connecticut	1,441,023	1,306,424	125,718	4,697	4,155	23	1	5
New England	**5,997,919**	**5,322,278**	**634,104**	**25,302**	**12,362**	**3,862**	**2**	**9**
New York	7,142,359	6,284,571	819,094	12,383	9,928	16,376	5	2
New Jersey	3,331,958	2,920,348	390,190	12,254	9,164	—	1	1
Pennsylvania	5,225,693	4,655,956	531,886	29,869	7,281	696	4	1
Middle Atlantic	**15,700,010**	**13,860,875**	**1,741,170**	**54,506**	**26,373**	**17,072**	**10**	**4**
Ohio	4,710,736	4,219,198	443,969	30,719	6,597	10,235	2	16
Indiana	2,437,139	2,175,228	241,541	15,258	3,792	1,317	1	2
Illinois	4,831,537	4,366,921	442,169	6,933	2,994	12,515	2	3
Michigan	4,090,601	3,683,163	387,479	14,162	3,680	2,114	—	3
Wisconsin	2,250,627	1,997,120	242,453	5,159	4,984	791	—	120
East North Central	**18,320,640**	**16,441,630**	**1,757,611**	**72,231**	**22,047**	**26,972**	**5**	**144**
Minnesota	1,956,769	1,753,022	186,613	9,154	3,602	4,376	—	2
Iowa	1,306,295	1,137,294	156,974	4,137	1,512	6,376	—	2
Missouri	2,378,812	2,105,610	252,322	10,807	3,974	6,047	1	51
North Dakota	310,431	262,109	45,033	1,423	819	1,044	—	3
South Dakota	329,498	284,276	41,645	1,309	1,035	1,232	—	1
Nebraska	789,383	654,667	127,366	2,228	1,054	4,065	—	3
Kansas	1,191,027	1,019,023	159,096	9,705	2,341	781	—	1
West North Central	**8,262,215**	**7,216,001**	**969,049**	**38,843**	**14,337**	**23,921**	**1**	**63**
Delaware	314,496	282,619	30,672	666	532	6	—	1
Maryland	1,937,306	1,741,805	183,539	11,001	937	21	2	1
District of Columbia	219,788	192,953	26,635	164	35	—	1	—
Virginia	2,627,051	2,335,201	258,565	4,941	2,125	26,219	—	—
West Virginia	860,494	752,117	96,310	10,624	1,166	277	—	—
North Carolina	3,312,709	2,888,212	397,826	13,708	10,484	2,455	—	24
South Carolina	1,627,927	1,414,094	203,455	4,239	3,500	2,622	—	17
Georgia	2,955,021	2,634,255	291,447	19,350	7,453	2,515	1	—
Florida	6,524,919	5,784,467	695,265	23,755	6,843	14,585	1	3
South Atlantic	**20,379,711**	**18,025,723**	**2,183,714**	**88,448**	**33,075**	**48,700**	**5**	**46**
Kentucky	1,687,034	1,478,043	186,841	8,419	5,178	8,546	—	7
Tennessee	2,296,949	1,989,371	282,057	22,651	1,137	1,716	—	17
Alabama	1,891,180	1,644,330	233,029	10,072	2,438	1,299	—	12
Mississippi	1,138,295	981,269	145,720	6,386	950	3,969	—	1
East South Central	**7,013,458**	**6,093,013**	**847,647**	**47,528**	**9,703**	**15,530**	**—**	**37**
Arkansas	1,147,429	1,003,037	120,077	20,106	1,063	3,146	—	—
Louisiana	1,810,074	1,594,337	186,760	15,904	2,314	10,757	—	2
Oklahoma	1,550,152	1,339,740	183,437	15,631	1,319	10,025	—	—
Texas	7,265,186	6,317,420	853,498	58,541	6,274	29,120	—	333
West South Central	**11,772,841**	**10,254,534**	**1,343,772**	**110,182**	**10,970**	**53,048**	**—**	**335**
Montana	410,206	342,743	61,173	2,651	3,277	156	—	206
Idaho	477,887	402,471	72,758	2,042	544	66	—	6
Wyoming	241,896	197,439	40,759	3,058	411	228	—	1
Colorado	1,584,668	1,383,337	198,331	1,447	989	564	—	—
New Mexico	671,315	574,983	90,222	4,601	459	985	—	65
Arizona	1,619,941	1,441,146	162,092	5,721	8,594	2,370	1	17
Utah	634,885	564,823	59,964	7,728	2,107	256	—	7
Nevada	577,691	501,793	74,686	719	346	147	—	—
Mountain	**6,218,489**	**5,408,735**	**759,985**	**27,967**	**16,727**	**4,772**	**1**	**302**
Washington	2,191,016	1,948,097	231,985	7,886	2,813	178	1	56
Oregon	1,285,374	1,119,696	161,424	3,014	1,169	53	—	18
California	12,033,531	10,572,552	1,395,962	35,981	27,808	259	4	965
Pacific	**15,509,921**	**13,640,345**	**1,789,371**	**46,881**	**31,790**	**490**	**5**	**1,039**
Alaska	221,347	188,865	30,241	617	829	793	—	2
Hawaii	369,834	319,097	48,499	723	1,515	—	—	—
Alaska & Hawaii	**591,181**	**507,962**	**78,740**	**1,340**	**2,344**	**793**	**—**	**2**

p Preliminary

TABLE 50B

ULTIMATE CUSTOMERS
TOTAL ELECTRIC UTILITY INDUSTRY

BY STATE AND CLASS OF SERVICE AT DECEMBER 31, 1989r

State/Division	Total Ultimate Customers	Residential	Commercial	Industrial	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Inter-departmental
Total United States	**108,468,242**	**95,616,026**	**11,976,449**	**506,597**	**176,215**	**190,954**	**28**	**1,973**
Maine	632,605	562,266	66,357	2,789	1,073	117	—	3
New Hampshire	555,098	481,622	70,740	1,642	664	430	—	—
Vermont	292,066	255,189	34,976	1,237	306	356	—	2
Massachusetts	2,606,281	2,309,406	276,969	12,050	5,126	2,729	1	—
Rhode Island	433,061	385,160	44,302	2,689	878	32	—	—
Connecticut	1,433,989	1,300,149	124,992	4,730	4,081	30	1	6
New England	**5,953,100**	**5,293,792**	**618,336**	**25,137**	**12,128**	**3,694**	**2**	**11**
New York	7,085,894	6,234,995	812,746	12,154	9,825	16,167	5	2
New Jersey	3,301,874	2,896,606	383,987	12,352	8,927	—	1	1
Pennsylvania	5,174,375	4,613,628	523,029	29,788	7,224	701	4	1
Middle Atlantic	**15,562,143**	**13,745,229**	**1,719,762**	**54,294**	**25,976**	**16,868**	**10**	**4**
Ohio	4,669,715	4,183,575	439,114	30,401	6,372	10,237	2	14
Indiana	2,414,489	2,156,081	238,355	14,981	3,726	1,343	1	2
Illinois	4,777,675	4,319,998	435,597	6,758	2,955	12,362	2	3
Michigan	4,040,783	3,642,342	378,644	13,972	3,703	2,119	—	3
Wisconsin	2,223,210	1,974,304	238,054	5,114	4,832	785	—	121
East North Central	**18,125,872**	**16,276,300**	**1,729,764**	**71,226**	**21,588**	**26,846**	**5**	**143**
Minnesota	1,935,031	1,735,294	183,217	8,668	3,448	4,402	—	2
Iowa	1,301,411	1,133,486	156,043	4,178	1,511	6,191	—	2
Missouri	2,363,103	2,093,154	249,819	10,025	3,908	6,144	1	52
North Dakota	309,725	261,645	44,472	1,855	740	1,010	—	3
South Dakota	327,420	282,573	41,554	1,023	1,033	1,236	—	1
Nebraska	783,495	649,634	126,573	2,226	1,030	4,029	—	3
Kansas	1,184,586	1,015,919	155,852	9,732	2,307	775	—	1
West North Central	**8,204,771**	**7,171,705**	**957,530**	**37,707**	**13,977**	**23,787**	**1**	**64**
Delaware	309,652	278,330	30,114	681	520	6	—	1
Maryland	1,903,663	1,711,932	180,263	10,527	917	21	2	1
District of Columbia	217,097	190,405	26,488	168	35	—	1	—
Virginia	2,586,974	2,300,852	253,668	4,897	2,098	25,459	—	—
West Virginia	852,442	746,295	94,240	10,514	1,121	272	—	—
North Carolina	3,275,835	2,856,607	392,789	13,640	10,283	2,493	—	23
South Carolina	1,606,291	1,397,381	198,604	4,266	3,453	2,572	—	15
Georgia	2,927,323	2,607,165	290,739	19,523	7,386	2,509	1	—
Florida	6,389,933	5,660,514	684,254	24,772	6,464	13,925	1	3
South Atlantic	**20,069,210**	**17,749,481**	**2,151,159**	**88,988**	**32,277**	**47,257**	**5**	**43**
Kentucky	1,672,476	1,466,540	184,093	8,436	5,056	8,344	—	7
Tennessee	2,262,010	1,965,168	271,624	22,395	1,146	1,660	—	17
Alabama	1,868,274	1,625,979	228,688	9,873	2,411	1,311	—	12
Mississippi	1,130,400	975,178	143,525	6,849	948	3,898	—	2
East South Central	**6,933,160**	**6,032,865**	**827,930**	**47,553**	**9,561**	**15,213**	**—**	**38**
Arkansas	1,142,831	999,848	119,050	19,556	1,059	3,318	—	—
Louisiana	1,795,773	1,582,158	185,111	15,678	2,381	10,443	—	2
Oklahoma	1,543,986	1,333,901	183,612	15,036	1,319	10,118	—	—
Texas	7,189,820	6,251,192	846,089	58,233	6,496	27,477	—	333
West South Central	**11,672,410**	**10,167,099**	**1,333,862**	**108,503**	**11,255**	**51,356**	**—**	**335**
Montana	407,932	341,324	60,312	2,684	3,244	154	—	214
Idaho	468,799	395,325	70,867	2,004	531	68	—	4
Wyoming	241,238	197,079	40,434	3,087	407	230	—	1
Colorado	1,576,330	1,375,780	197,518	1,443	981	604	—	4
New Mexico	665,382	569,258	90,174	4,481	407	1,002	—	60
Arizona	1,594,116	1,416,342	162,350	4,615	8,590	2,201	1	17
Utah	626,234	557,554	60,053	6,350	2,018	252	—	7
Nevada	541,052	469,019	70,876	668	341	147	—	1
Mountain	**6,121,083**	**5,321,681**	**752,584**	**25,332**	**16,519**	**4,658**	**1**	**308**
Washington	2,142,367	1,904,266	227,716	7,430	2,721	180	1	53
Oregon	1,256,546	1,094,385	158,179	2,754	1,158	53	—	17
California	11,843,668	10,357,533	1,421,878	36,364	26,684	251	3	955
Pacific	**15,242,581**	**13,356,184**	**1,807,773**	**46,548**	**30,563**	**484**	**4**	**1,025**
Alaska	221,631	189,343	30,048	619	828	791	—	2
Hawaii	362,281	312,347	47,701	690	1,543	—	—	—
Alaska & Hawaii	**583,912**	**501,690**	**77,749**	**1,309**	**2,371**	**791**	**—**	**2**

r Revised.

TABLE 51A

ULTIMATE CUSTOMERS INVESTOR-OWNED ELECTRIC UTILITIES

BY STATE AND CLASS OF SERVICE AT DECEMBER 31, 1990p

State/Division	Total Ultimate Customers	Residential	Commercial	Industrial	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Inter-departmental
Total United States	**84,228,417**	**74,214,166**	**9,329,842**	**383,388**	**140,852**	**159,683**	**23**	**463**
Maine	609,532	541,459	64,173	2,752	1,051	97	—	—
New Hampshire	487,346	421,446	63,238	1,572	650	440	—	—
Vermont	228,346	198,652	28,936	133	290	335	—	—
Massachusetts	2,308,311	2,034,947	257,275	8,292	5,113	2,683	1	—
Rhode Island	432,986	384,644	44,809	2,569	927	37	—	—
Connecticut	1,377,644	1,250,806	118,151	4,558	4,128	—	1	—
New England	**5,444,165**	**4,831,954**	**576,582**	**19,876**	**12,159**	**3,592**	**2**	**—**
New York	6,983,170	6,144,271	802,945	9,959	9,838	16,151	4	2
New Jersey	3,254,677	2,851,635	381,975	11,927	9,138	—	1	1
Pennsylvania	4,981,747	4,430,686	514,905	29,350	6,394	407	4	1
Middle Atlantic	**15,219,594**	**13,426,592**	**1,699,825**	**51,236**	**25,370**	**16,558**	**9**	**4**
Ohio	4,157,273	3,720,595	392,903	28,399	6,041	9,317	2	16
Indiana	1,877,066	1,660,267	200,952	11,858	3,110	876	1	2
Illinois	4,442,789	4,011,076	411,601	6,134	2,664	11,309	2	3
Michigan	3,633,122	3,268,959	346,732	12,890	2,988	1,550	—	3
Wisconsin	1,873,681	1,668,806	196,970	2,863	4,391	624	—	27
East North Central	**15,983,931**	**14,329,703**	**1,549,158**	**62,144**	**19,194**	**23,676**	**5**	**51**
Minnesota	1,196,104	1,054,348	129,409	6,985	2,332	3,028	—	2
Iowa	952,338	816,430	127,339	2,330	905	5,332	—	2
Missouri	1,601,855	1,405,912	181,480	8,788	2,281	3,353	—	41
North Dakota	198,327	166,168	29,888	1,245	478	546	—	2
South Dakota	177,786	149,533	26,598	756	389	509	—	1
Nebraska	—	—	—	—	—	—	—	—
Kansas	796,900	695,509	92,581	7,515	1,084	210	—	1
West North Central	**4,923,310**	**4,287,900**	**587,295**	**27,619**	**7,469**	**12,978**	**—**	**49**
Delaware	230,078	206,534	22,929	380	234	—	—	1
Maryland	1,788,620	1,606,840	170,264	10,680	833	—	2	1
District of Columbia	219,788	192,953	26,635	164	35	—	1	—
Virginia	2,217,402	1,967,404	219,606	3,495	1,984	24,913	—	—
West Virginia	852,282	744,891	95,353	10,598	1,166	274	—	—
North Carolina	2,185,421	1,868,204	296,890	10,760	7,993	1,557	—	17
South Carolina	997,383	847,473	142,142	3,521	2,507	1,723	—	17
Georgia	1,680,943	1,475,340	190,436	12,191	2,275	700	1	—
Florida	5,139,280	4,557,157	542,870	20,097	6,094	13,058	1	3
South Atlantic	**15,311,197**	**13,466,796**	**1,707,125**	**71,886**	**23,121**	**42,225**	**5**	**39**
Kentucky	979,062	843,009	118,920	4,507	4,692	7,933	—	1
Tennessee	38,745	34,527	3,893	167	122	36	—	—
Alabama	1,135,887	985,566	144,340	5,322	658	—	—	1
Mississippi	524,966	446,861	71,374	3,581	526	2,623	—	1
East South Central	**2,678,660**	**2,309,963**	**338,527**	**13,577**	**5,998**	**10,592**	**—**	**3**
Arkansas	711,966	611,139	79,452	19,333	526	1,516	—	—
Louisiana	1,400,019	1,228,765	145,858	12,868	2,214	10,312	—	2
Oklahoma	1,053,716	913,469	116,180	13,753	1,073	9,241	—	—
Texas	5,339,840	4,646,166	609,032	52,277	5,730	26,634	—	1
West South Central	**8,505,541**	**7,399,539**	**950,522**	**98,231**	**9,543**	**47,703**	**—**	**3**
Montana	301,903	250,695	45,379	2,590	2,913	126	—	200
Idaho	400,454	335,714	62,446	1,739	500	49	—	6
Wyoming	153,892	128,207	22,887	2,560	177	60	—	1
Colorado	1,016,148	901,085	114,239	189	501	134	—	—
New Mexico	476,927	417,065	54,202	4,387	347	884	—	42
Arizona	925,556	819,855	99,177	4,927	737	860	—	—
Utah	490,797	439,782	41,481	7,619	1,865	48	—	2
Nevada	548,565	478,055	69,708	680	101	21	—	—
Mountain	**4,314,242**	**3,770,458**	**509,519**	**24,691**	**7,141**	**2,182**	**—**	**251**
Washington	1,025,762	912,209	107,119	4,887	1,511	1	—	35
Oregon	1,015,206	883,456	128,312	2,419	1,014	1	—	4
California	9,420,036	8,262,360	1,125,223	5,672	26,717	38	2	24
Pacific	**11,461,004**	**10,058,025**	**1,360,654**	**12,978**	**29,242**	**40**	**2**	**63**
Alaska	16,939	14,139	2,136	427	100	137	—	—
Hawaii	369,834	319,097	48,499	723	1,515	—	—	—
Alaska & Hawaii	**386,773**	**333,236**	**50,635**	**1,150**	**1,615**	**137**	**—**	**—**

p Preliminary.

TABLE 51B

ULTIMATE CUSTOMERS
INVESTOR-OWNED ELECTRIC UTILITIES

BY STATE AND CLASS OF SERVICE AT DECEMBER 31, 1989r

State/Division	Total Ultimate Customers	Residential	Commercial	Industrial	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Inter-departmental
Total United States	**83,029,027**	**73,177,333**	**9,181,076**	**376,790**	**137,579**	**155,770**	**22**	**457**
Maine	605,087	538,089	63,206	2,653	1,045	94		—
New Hampshire	484,950	420,142	62,148	1,592	641	427		—
Vermont	226,412	197,070	28,602	132	275	333		—
Massachusetts	2,286,164	2,024,854	245,683	8,023	5,071	2,532	1	—
Rhode Island	429,234	381,747	43,912	2,667	877	31		—
Connecticut	1,370,405	1,244,294	117,451	4,599	4,060		1	—
New England	**5,402,252**	**4,806,196**	**561,002**	**19,666**	**11,969**	**3,417**	**2**	**—**
New York	6,926,709	6,094,736	796,554	9,736	9,735	15,942	4	2
New Jersey	3,224,634	2,827,346	375,760	12,025	8,901		1	1
Pennsylvania	4,930,429	4,388,358	506,048	29,269	6,337	412	4	1
Middle Atlantic	**15,081,772**	**13,311,040**	**1,678,362**	**51,030**	**24,973**	**16,354**	**9**	**4**
Ohio	4,116,252	3,684,972	388,048	28,081	5,816	9,319	2	14
Indiana	1,854,352	1,641,120	197,726	11,557	3,044	902	1	2
Illinois	4,389,975	3,965,088	405,142	5,959	2,625	11,156	2	3
Michigan	3,586,975	3,229,974	339,681	12,751	3,011	1,555		3
Wisconsin	1,846,374	1,646,102	192,578	2,809	4,239	618		28
East North Central	**15,793,928**	**14,167,256**	**1,523,175**	**61,157**	**18,735**	**23,550**	**5**	**50**
Minnesota	1,174,350	1,036,593	126,024	6,499	2,178	3,054		2
Iowa	947,454	812,622	126,408	2,371	904	5,147		2
Missouri	1,588,938	1,395,672	179,555	8,004	2,215	3,450		42
North Dakota	197,623	165,704	29,327	1,677	399	514		2
South Dakota	175,706	147,830	26,507	470	387	511		1
Nebraska	—	—	—	—	—	—		—
Kansas	789,576	691,523	89,333	7,465	1,050	204		1
West North Central	**4,873,647**	**4,249,944**	**577,154**	**26,486**	**7,133**	**12,880**	**—**	**50**
Delaware	225,234	202,245	22,371	395	222			1
Maryland	1,754,977	1,576,967	166,988	10,206	813		2	1
District of Columbia	217,097	190,405	26,488	168	35		1	
Virginia	2,177,826	1,933,299	214,969	3,447	1,958	24,153		
West Virginia	844,230	739,069	93,283	10,488	1,121	269		
North Carolina	2,148,275	1,836,414	291,770	10,686	7,794	1,595		16
South Carolina	975,747	830,760	137,291	3,548	2,460	1,673		15
Georgia	1,655,370	1,449,977	190,112	12,380	2,207	693	1	—
Florida	5,011,484	4,439,922	532,313	21,132	5,715	12,398	1	3
South Atlantic	**15,010,240**	**13,199,058**	**1,675,585**	**72,450**	**22,325**	**40,781**	**5**	**36**
Kentucky	966,521	832,779	116,788	4,576	4,602	7,775		1
Tennessee	38,227	34,062	3,850	159	120	36		
Alabama	1,121,739	974,622	141,265	5,200	651			1
Mississippi	521,777	443,846	70,724	4,124	527	2,555		1
East South Central	**2,648,264**	**2,285,309**	**332,627**	**14,059**	**5,900**	**10,366**	**—**	**3**
Arkansas	707,368	607,350	78,425	18,783	522	1,688		—
Louisiana	1,385,718	1,216,586	144,209	12,642	2,281	9,998		2
Oklahoma	1,047,550	907,630	116,355	13,158	1,073	9,334		—
Texas	5,275,948	4,583,436	609,646	51,922	5,952	24,991		1
West South Central	**8,416,584**	**7,315,602**	**948,635**	**96,505**	**9,828**	**46,011**	**—**	**3**
Montana	299,629	249,276	44,518	2,623	2,880	124		208
Idaho	391,366	328,568	60,555	1,701	487	51		4
Wyoming	153,233	127,847	22,562	2,589	173	61		1
Colorado	1,008,643	894,195	113,592	190	493	173		—
New Mexico	470,994	411,340	54,154	4,267	295	901		37
Arizona	906,126	800,857	99,813	3,817	777	862		—
Utah	482,149	432,513	41,570	6,241	1,776	47		2
Nevada	511,924	445,281	65,898	628	96	21		—
Mountain	**4,224,064**	**3,689,877**	**502,662**	**22,056**	**6,977**	**2,240**	**—**	**252**
Washington	994,582	884,336	104,267	4,470	1,476	1		32
Oregon	988,538	860,073	125,295	2,164	1,002	1		3
California	9,216,049	8,082,242	1,102,501	5,628	25,619	34	1	24
Pacific	**11,199,169**	**9,826,651**	**1,332,063**	**12,262**	**28,097**	**36**	**1**	**59**
Alaska	16,826	14,053	2,110	429	99	135		—
Hawaii	362,281	312,347	47,701	690	1,543			—
Alaska & Hawaii	**379,107**	**326,400**	**49,811**	**1,119**	**1,642**	**135**	**—**	**—**

r Revised

TABLE 52A

AVERAGE NUMBER OF CUSTOMERS TOTAL ELECTRIC UTILITY INDUSTRY

BY STATE AND CERTAIN CLASS OF SERVICE — YEAR 1990p

State/Division	Total Ultimate Customers	Residential	Commercial	Industrial
Total United States	**109,032,046**	**96,104,155**	**12,030,248**	**523,103**
Maine	632,789	561,572	66,882	2,865
New Hampshire	560,480	485,782	71,989	1,627
Vermont	294,241	256,968	35,513	1,064
Massachusetts	2,616,883	2,309,367	287,080	12,447
Rhode Island	434,908	386,474	44,865	2,623
Connecticut	1,437,721	1,303,386	125,414	4,730
New England	**5,977,022**	**5,303,549**	**631,743**	**25,346**
New York	7,117,789	6,261,998	817,237	12,327
New Jersey	3,322,769	2,913,145	388,253	12,310
Pennsylvania	5,198,377	4,632,769	527,750	29,886
Middle Atlantic	**15,638,935**	**13,807,912**	**1,733,240**	**54,523**
Ohio	4,691,679	4,201,413	443,228	30,303
Indiana	2,424,259	2,163,869	240,162	15,122
Illinois	4,805,235	4,344,539	438,453	6,866
Michigan	4,066,651	3,662,448	384,300	14,121
Wisconsin	2,248,156	1,996,265	241,100	5,140
East North Central	**18,235,980**	**16,368,534**	**1,747,243**	**71,552**
Minnesota	1,945,112	1,742,044	185,036	8,947
Iowa	1,302,405	1,133,979	156,404	4,142
Missouri	2,369,896	2,098,108	251,573	10,242
North Dakota	309,531	261,408	44,896	1,419
South Dakota	328,684	283,392	41,718	1,294
Nebraska	786,162	651,988	126,991	2,205
Kansas	1,187,064	1,016,389	157,850	9,722
West North Central	**8,228,854**	**7,187,308**	**964,468**	**37,971**
Delaware	312,422	280,795	30,426	666
Maryland	1,922,077	1,728,020	182,371	10,731
District of Columbia	218,708	191,970	26,538	164
Virginia	2,607,268	2,317,572	256,824	4,921
West Virginia	855,252	747,973	95,322	10,541
North Carolina	3,198,730	2,786,211	385,943	13,613
South Carolina	1,619,774	1,407,793	201,650	4,267
Georgia	2,942,489	2,622,114	291,007	19,437
Florida	6,444,098	5,708,287	690,606	24,193
South Atlantic	**20,120,818**	**17,790,735**	**2,160,687**	**88,533**
Kentucky	1,679,979	1,472,717	185,274	8,433
Tennessee	2,285,339	1,979,861	279,902	22,737
Alabama	1,878,542	1,633,875	230,929	10,034
Mississippi	1,135,233	978,814	145,059	6,463
East South Central	**6,979,093**	**6,065,267**	**841,164**	**47,667**
Arkansas	1,149,101	1,003,162	120,042	21,706
Louisiana	1,802,164	1,587,863	185,622	15,793
Oklahoma	1,546,883	1,336,706	183,713	15,141
Texas	7,233,059	6,286,096	853,620	58,333
West South Central	**11,731,207**	**10,213,827**	**1,342,997**	**110,973**
Montana	409,513	341,189	60,916	3,778
Idaho	474,760	398,696	71,947	3,511
Wyoming	242,323	197,673	40,679	3,332
Colorado	1,581,698	1,380,230	198,277	1,447
New Mexico	668,649	572,247	90,350	4,553
Arizona	1,595,944	1,417,666	161,476	5,809
Utah	630,820	560,682	60,177	7,624
Nevada	560,400	486,378	72,832	698
Mountain	**6,164,107**	**5,354,761**	**756,654**	**30,752**
Washington	2,169,539	1,925,095	230,942	10,482
Oregon	1,275,998	1,107,882	160,081	6,777
California	11,922,228	10,473,665	1,382,870	37,203
Pacific	**15,367,765**	**13,506,642**	**1,773,893**	**54,462**
Alaska	221,568	189,166	30,161	617
Hawaii	366,697	316,454	47,998	707
Alaska & Hawaii	**588,265**	**505,620**	**78,159**	**1,324**

p Preliminary

TABLE 52B

AVERAGE NUMBER OF CUSTOMERS TOTAL ELECTRIC UTILITY INDUSTRY

BY STATE AND CERTAIN CLASS OF SERVICE — YEAR 1989r

State/Division	Total Ultimate Customers	Residential	Commercial	Industrial
Total United States	**107,599,529**	**94,907,277**	**11,818,463**	**508,994**
Maine	627,657	558,158	65,556	2,751
New Hampshire	554,171	481,295	69,981	1,597
Vermont	290,204	253,777	34,521	1,237
Massachusetts	2,587,942	2,294,156	273,840	12,066
Rhode Island	428,970	382,049	43,337	2,689
Connecticut	1,427,441	1,295,001	123,588	4,731
New England	**5,916,385**	**5,264,436**	**610,823**	**25,071**
New York	7,053,433	6,208,360	807,313	11,106
New Jersey	3,286,185	2,886,797	378,348	12,446
Pennsylvania	5,143,045	4,587,007	518,399	29,668
Middle Atlantic	**15,482,663**	**13,682,164**	**1,704,060**	**53,220**
Ohio	4,645,352	4,162,436	436,025	30,226
Indiana	2,400,439	2,144,403	236,245	14,768
Illinois	4,756,746	4,302,540	432,258	6,701
Michigan	4,016,652	3,621,226	375,786	13,842
Wisconsin	2,203,910	1,957,765	235,658	5,074
East North Central	**18,023,099**	**16,188,370**	**1,715,972**	**70,611**
Minnesota	1,925,391	1,726,605	182,401	8,581
Iowa	1,297,735	1,130,352	155,415	4,232
Missouri	2,349,934	2,082,387	247,235	10,159
North Dakota	309,095	261,139	44,348	1,850
South Dakota	326,062	281,221	41,556	1,011
Nebraska	780,506	647,273	126,049	2,202
Kansas	1,178,299	1,009,401	156,051	9,770
West North Central	**8,167,022**	**7,138,378**	**953,055**	**37,805**
Delaware	307,026	276,039	29,771	691
Maryland	1,885,896	1,696,803	177,148	11,009
District of Columbia	215,772	189,227	26,343	166
Virginia	2,559,322	2,277,151	250,042	4,887
West Virginia	848,054	742,835	93,359	10,478
North Carolina	3,150,734	2,747,976	376,597	13,565
South Carolina	1,600,527	1,393,176	197,071	4,255
Georgia	2,906,123	2,591,021	285,720	19,528
Florida	6,291,631	5,569,690	676,995	25,075
South Atlantic	**19,765,085**	**17,483,918**	**2,113,046**	**89,654**
Kentucky	1,665,083	1,467,397	176,087	8,293
Tennessee	2,247,354	1,974,914	247,378	22,265
Alabama	1,856,490	1,625,537	217,465	9,782
Mississippi	1,123,549	975,720	136,265	6,720
East South Central	**6,892,476**	**6,043,568**	**777,195**	**47,060**
Arkansas	1,142,533	998,490	118,673	20,707
Louisiana	1,794,755	1,581,294	185,081	15,695
Oklahoma	1,539,885	1,330,545	183,368	14,957
Texas	7,156,105	6,222,847	843,100	58,253
West South Central	**11,633,278**	**10,133,176**	**1,330,222**	**109,612**
Montana	407,339	340,459	59,840	3,608
Idaho	466,415	392,486	70,099	3,233
Wyoming	242,235	197,764	40,813	3,010
Colorado	1,570,654	1,370,635	196,970	1,432
New Mexico	659,603	564,023	89,708	4,450
Arizona	1,568,256	1,391,884	160,890	4,654
Utah	622,477	553,825	59,693	6,728
Nevada	523,276	453,459	68,685	645
Mountain	**6,060,255**	**5,264,535**	**746,698**	**27,760**
Washington	2,120,756	1,882,372	227,872	7,323
Oregon	1,250,058	1,085,856	160,310	2,676
California	11,708,207	10,241,771	1,402,131	36,910
Pacific	**15,079,021**	**13,209,999**	**1,790,313**	**46,909**
Alaska	221,611	189,315	30,057	619
Hawaii	358,634	309,418	47,022	673
Alaska & Hawaii	**580,245**	**498,733**	**77,079**	**1,292**

r Revised.

TABLE 53A

AVERAGE NUMBER OF CUSTOMERS INVESTOR-OWNED ELECTRIC UTILITIES

BY STATE AND CERTAIN CLASS OF SERVICE — YEAR 1990p

State/Division	Total Ultimate Customers	Residential	Commercial	Industrial
Total United States	**83,676,804**	**73,708,665**	**9,277,124**	**392,358**
Maine	608,832	540,781	63,903	2,726
New Hampshire	489,573	423,733	63,201	1,579
Vermont	227,548	197,937	28,863	133
Massachusetts	2,292,329	2,020,463	255,852	8,287
Rhode Island	431,045	382,982	44,518	2,603
Connecticut	1,374,237	1,247,665	117,871	4,591
New England	**5,423,564**	**4,813,561**	**574,208**	**19,919**
New York	6,958,522	6,121,641	801,066	9,904
New Jersey	3,245,542	2,844,488	380,036	11,983
Pennsylvania	4,954,431	4,407,499	510,769	29,367
Middle Atlantic	**15,158,495**	**13,373,628**	**1,691,871**	**51,254**
Ohio	4,138,216	3,702,810	392,162	27,983
Indiana	1,864,225	1,648,929	199,589	11,719
Illinois	4,417,130	3,989,263	407,960	6,067
Michigan	3,610,856	3,249,589	343,895	12,846
Wisconsin	1,871,231	1,667,978	195,614	2,841
East North Central	**15,901,658**	**14,258,569**	**1,539,220**	**61,456**
Minnesota	1,184,430	1,043,346	127,840	6,778
Iowa	948,448	813,115	126,769	2,335
Missouri	1,593,970	1,399,405	180,773	8,222
North Dakota	197,427	165,467	29,751	1,241
South Dakota	176,972	148,649	26,671	741
Nebraska	—	—	—	—
Kansas	792,435	692,396	91,310	7,454
West North Central	**4,893,682**	**4,262,378**	**583,114**	**26,771**
Delaware	228,004	204,710	22,683	380
Maryland	1,773,391	1,593,055	169,096	10,410
District of Columbia	218,708	191,970	26,538	164
Virginia	2,197,771	1,949,950	217,848	3,469
West Virginia	847,040	740,747	94,365	10,515
North Carolina	2,181,365	1,864,407	296,695	10,697
South Carolina	989,230	841,172	140,337	3,549
Georgia	1,669,347	1,463,945	190,189	12,274
Florida	5,060,447	4,482,872	538,299	20,542
South Atlantic	**15,165,303**	**13,332,828**	**1,696,050**	**72,000**
Kentucky	972,753	838,067	117,703	4,504
Tennessee	38,454	34,268	3,870	161
Alabama	1,127,593	978,837	142,837	5,263
Mississippi	524,060	445,945	71,319	3,664
East South Central	**2,662,860**	**2,297,117**	**335,729**	**13,592**
Arkansas	713,638	611,264	79,417	20,933
Louisiana	1,392,109	1,222,291	144,720	12,757
Oklahoma	1,050,447	910,435	116,456	13,263
Texas	5,308,754	4,614,498	610,609	52,053
West South Central	**8,464,948**	**7,358,488**	**951,202**	**99,006**
Montana	301,210	249,141	45,122	3,717
Idaho	397,327	331,939	61,635	3,208
Wyoming	154,319	128,441	22,807	2,834
Colorado	1,013,636	898,542	114,246	191
New Mexico	474,261	414,329	54,330	4,339
Arizona	910,358	804,928	98,821	5,008
Utah	486,732	435,641	41,694	7,515
Nevada	531,274	462,640	67,854	659
Mountain	**4,269,117**	**3,725,601**	**506,509**	**27,471**
Washington	1,013,259	898,227	106,004	7,495
Oregon	1,007,043	872,766	127,049	6,184
California	9,333,239	8,184,909	1,116,034	6,076
Pacific	**11,353,541**	**9,955,902**	**1,349,087**	**19,755**
Alaska	16,939	14,139	2,136	427
Hawaii	366,697	316,454	47,998	707
Alaska & Hawaii	**383,636**	**330,593**	**50,134**	**1,134**

p Preliminary.

TABLE 53B

AVERAGE NUMBER OF CUSTOMERS INVESTOR-OWNED ELECTRIC UTILITIES

BY STATE AND CERTAIN CLASS OF SERVICE — YEAR 1989r

State/Division	Total Ultimate Customers	Residential	Commercial	Industrial
Total United States	**82,360,972**	**72,599,701**	**9,093,672**	**378,360**
Maine	600,139	533,981	62,405	2,615
New Hampshire	484,023	419,815	61,389	1,547
Vermont	224,550	195,658	28,147	132
Massachusetts	2,268,543	2,010,232	242,644	8,039
Rhode Island	425,143	378,636	42,947	2,667
Connecticut	1,364,080	1,239,300	116,116	4,600
New England	**5,366,478**	**4,777,622**	**553,648**	**19,600**
New York	6,894,301	6,068,127	791,145	8,691
New Jersey	3,209,122	2,818,251	370,184	12,119
Pennsylvania	4,899,099	4,361,737	501,418	29,149
Middle Atlantic	**15,002,522**	**13,248,115**	**1,662,747**	**49,959**
Ohio	4,091,889	3,663,833	384,959	27,906
Indiana	1,840,329	1,628,999	196,067	11,359
Illinois	4,369,591	3,948,022	401,956	5,902
Michigan	3,562,097	3,209,059	335,911	12,585
Wisconsin	1,827,063	1,629,544	190,185	2,774
East North Central	**15,690,969**	**14,079,457**	**1,509,078**	**60,526**
Minnesota	1,164,731	1,027,933	125,201	6,412
Iowa	943,778	809,488	125,780	2,425
Missouri	1,577,255	1,385,536	178,078	7,895
North Dakota	196,993	165,198	29,203	1,672
South Dakota	174,348	146,478	26,509	458
Nebraska				
Kansas	783,664	686,466	88,447	7,502
West North Central	**4,840,769**	**4,221,099**	**573,218**	**26,364**
Delaware	222,608	199,954	22,028	405
Maryland	1,737,210	1,561,838	163,873	10,688
District of Columbia	215,772	189,227	26,343	166
Virginia	2,150,671	1,909,616	211,823	3,434
West Virginia	839,842	735,609	92,402	10,452
North Carolina	2,134,359	1,826,691	287,818	10,648
South Carolina	969,983	826,555	135,758	3,537
Georgia	1,635,256	1,432,151	187,862	12,385
Florida	4,917,790	4,353,892	524,874	21,431
South Atlantic	**14,823,491**	**13,035,533**	**1,652,781**	**73,146**
Kentucky	960,171	828,156	115,304	4,434
Tennessee	37,934	33,781	3,854	149
Alabama	1,113,837	968,397	139,648	5,141
Mississippi	517,301	440,454	69,743	4,020
East South Central	**2,629,243**	**2,270,788**	**328,549**	**13,744**
Arkansas	707,070	606,592	78,048	19,934
Louisiana	1,384,700	1,215,722	144,179	12,659
Oklahoma	1,043,449	904,274	116,111	13,079
Texas	5,242,994	4,555,469	607,027	51,996
West South Central	**8,378,213**	**7,282,057**	**945,365**	**97,668**
Montana	299,036	248,411	44,046	3,547
Idaho	388,982	325,729	59,787	2,930
Wyoming	154,230	128,532	22,941	2,512
Colorado	1,003,509	889,641	113,022	181
New Mexico	465,215	406,105	53,688	4,236
Arizona	890,533	786,300	98,758	3,851
Utah	478,392	428,784	41,210	6,619
Nevada	494,148	429,721	63,707	605
Mountain	**4,174,045**	**3,643,223**	**497,159**	**24,481**
Washington	983,074	872,199	105,206	4,172
Oregon	982,732	852,166	127,476	2,089
California	9,113,976	7,993,971	1,089,313	5,509
Pacific	**11,079,782**	**9,718,336**	**1,321,995**	**11,770**
Alaska	16,826	14,053	2,110	429
Hawaii	358,634	309,418	47,022	673
Alaska & Hawaii	**375,460**	**323,471**	**49,132**	**1,102**

r Revised.

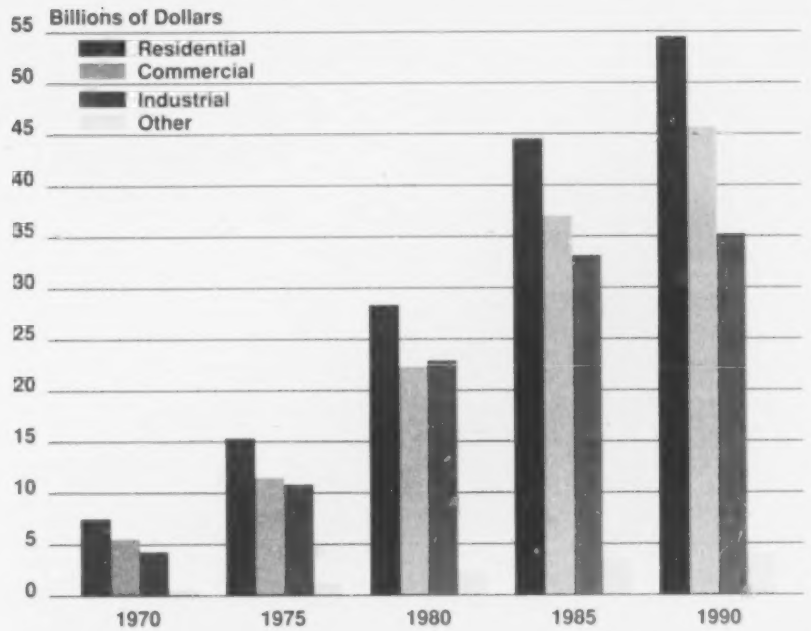
SECTION VIII

REVENUES

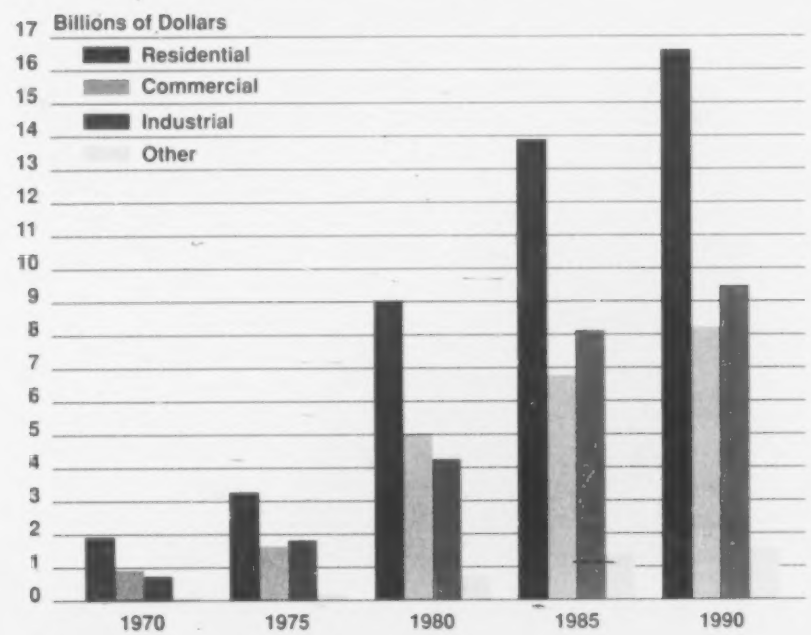
CHART VIII-A

REVENUES FROM ULTIMATE CUSTOMERS

INVESTOR-OWNED UTILITIES



NON-INVESTOR-OWNED UTILITIES



Based on Tables 56 and 57, page 64.

TABLE 56

REVENUES
TOTAL ELECTRIC UTILITY INDUSTRY

BY YEAR AND CLASS OF SERVICE
THOUSANDS OF DOLLARS

Year	Total Revenue from Sales†	Exports to Canada and Mexico	Total from Ultimate Customers	Residential	Commercial*	Industrial*	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Interdepartmental
1990p	**$175,964,232**	**$460,863**	**$175,503,369**	**$71,174,435**	**$53,875,110**	**$44,778,020**	**$1,582,176**	**$3,593,659**	**$333,744**	**$166,225**
1989r	169,903,112	276,332	169,626,780	68,760,042	51,561,710	43,745,803	1,544,298	3,518,362	328,974	167,591
1988	162,449,065	61,207	162,387,858	66,402,539	49,141,145	41,561,302	1,503,799	3,308,314	296,215	174,544
1987	155,713,924	33,407	155,700,236	63,049,059	46,745,107	40,630,608	1,509,246	3,273,260	301,635	191,321
1986	152,480,811	13,688	152,467,123	60,910,603	45,410,286	40,906,054	1,498,431	3,214,164	311,971	215,614
1985	149,187,568	25,216	149,162,352	58,591,751	44,060,554	41,367,847	1,476,092	3,163,473	313,165	189,470
1984	143,114,300	21,796	143,092,504	56,116,141	41,253,720	40,795,789	1,375,931	3,044,623	302,725	203,574
1983	129,596,675	7,874	129,588,801	51,226,246	37,103,377	36,611,630	1,324,955	2,864,037	296,766	161,790
1982	121,597,243	13,012	121,584,231	47,188,127	34,150,840	35,881,745	1,254,430	2,633,749	291,751	183,589
1981	111,028,011	26,838	111,001,173	42,824,457	31,325,322	33,030,093	1,168,691	2,247,307	238,554	166,749
1980	95,505,802	43,421	95,462,381	37,580,892	27,369,963	27,316,770	1,041,008	1,811,065	207,683	135,000
1979	79,649,846	9,609	79,640,237	30,798,693	22,264,356	23,825,487	918,157	1,517,333	188,628	127,583
1978	69,865,806	12,862	69,852,944	27,381,419	19,714,364	20,280,391	849,677	1,350,439	170,123	106,531
1977	62,629,713	19,684	62,610,029	24,687,500	18,021,548	17,629,321	776,771	1,245,155	145,680	104,054
1976	53,480,659	17,795	53,462,864	21,149,590	15,236,104	14,999,522	724,436	1,112,247	163,840	77,125
1975	46,864,685	11,229	46,853,456	18,803,156	13,486,624	12,707,490	659,332	975,799	159,160	61,895
1974	39,133,322	6,517	39,126,805	15,702,853	11,196,960	10,673,464	573,164	780,010	146,112	54,242
1973	31,668,281	5,422	31,662,859	13,194,773	9,147,188	8,073,636	491,831	620,991	91,903	42,537
1972	27,927,681	6,611	27,921,070	11,729,833	8,041,052	6,983,891	449,831	593,267	85,300	37,896
1971	24,735,122	9,963	24,725,159	10,483,526	7,071,971	6,133,964	411,534	512,772	77,862	33,530
1970	22,076,885	11,023	22,065,862	9,415,707	6,290,225	5,429,852	377,791	453,104	69,169	30,014

Note: Total may not equal sum of components due to independent rounding.
† Excludes other electric revenues.
** Commercial and Industrial are not wholly comparable on a year-to-year basis due to changes from one classification to another.*
p Preliminary. r Revised.

TABLE 57

REVENUES
INVESTOR-OWNED ELECTRIC UTILITIES

BY YEAR AND CLASS OF SERVICE
THOUSANDS OF DOLLARS

Year	Total Revenues	Other Revenues†	Total from Ultimate Customers	Residential	Commercial*	Industrial*	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Interdepartmental
1990p	**$146,211,361**	**$6,763,511**	**$139,447,850**	**$54,537,660**	**$45,587,467**	**$35,267,284**	**$1,237,385**	**$2,551,694**	**$163,490**	**$102,870**
1989r	140,883,099	7,005,070	133,878,029	52,325,314	43,440,937	34,132,516	1,212,529	2,499,378	158,725	108,631
1988	134,555,680	6,315,324	128,240,356	50,472,485	41,237,149	32,739,382	1,181,146	2,343,706	150,151	116,336
1987	129,437,054	6,124,194	123,312,860	47,962,072	39,437,160	32,110,727	1,198,413	2,320,698	147,336	139,454
1986	127,552,448	6,477,978	121,074,470	46,241,943	38,382,364	32,618,323	1,177,956	2,334,092	156,846	162,947
1985	125,547,432	6,711,160	118,836,272	44,651,261	37,241,520	33,204,216	1,159,701	2,285,783	157,728	136,064
1984	120,090,160	6,752,083	113,338,077	42,474,833	34,720,332	32,605,010	1,119,279	2,144,129	142,578	131,916
1983	109,446,384	6,581,164	102,865,220	39,067,481	31,336,661	29,275,314	1,057,872	1,899,057	126,300	102,536
1982	101,692,973	4,595,135	97,097,838	36,138,384	29,603,969	28,322,848	1,022,473	1,775,494	130,340	104,329
1981	94,266,325	5,497,327	88,768,998	32,622,129	26,370,929	26,986,678	933,861	1,641,632	120,124	93,645
1980	80,635,823	4,460,469	76,175,354	28,492,402	22,351,012	22,970,668	819,762	1,362,136	111,552	67,822
1979	68,151,992	4,274,055	63,877,937	23,613,621	18,463,690	19,801,718	716,209	1,137,987	80,002	64,710
1978	61,298,846	3,683,472	57,615,374	21,623,578	16,784,764	17,379,313	682,895	1,016,671	74,772	53,381
1977	55,141,656	3,364,784	51,776,872	19,541,802	15,404,917	15,092,313	632,154	964,452	90,263	50,971
1976	47,079,734	2,599,312	44,480,422	16,920,314	13,137,482	12,688,950	612,674	935,116	150,173	35,713
1975	41,855,398	2,285,281	39,570,117	15,434,811	11,766,583	10,785,231	558,554	841,853	157,539	25,546
1974	34,970,201	1,784,436	33,185,765	12,881,369	9,737,585	9,243,172	485,472	670,971	144,837	22,359
1973	27,525,926	1,208,947	26,316,979	10,590,178	7,807,644	6,875,953	412,921	522,826	90,753	16,704
1972	24,132,546	1,011,942	23,120,604	9,359,949	6,832,630	5,950,367	378,413	502,910	84,144	12,191
1971	21,230,373	835,581	20,394,792	8,308,330	6,016,096	5,199,601	347,972	435,949	76,701	10,143
1970	18,830,214	722,994	18,107,220	7,424,224	5,314,447	4,591,093	319,373	381,405	68,030	8,648

Note: Total may not equal sum of components due to independent rounding.
† Includes revenue from sales to non-investor-owned electric utilities, from exports and other electric revenues.
**Commercial and Industrial are not wholly comparable on a year-to-year basis due to changes from one classification to another.*
p Preliminary. r Revised.

TABLE 58

REVENUES IN PERCENT OF TOTAL TOTAL ELECTRIC UTILITY INDUSTRY

BY YEAR AND CLASS OF SERVICE

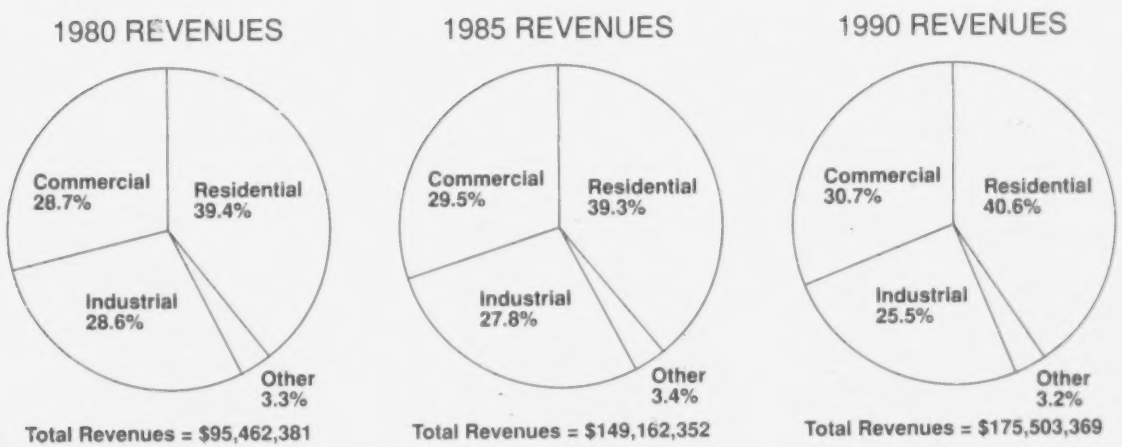
Year	Residential	Commercial	Industrial	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Inter-departmental
1990p	**40.6%**	**30.7%**	**25.5%**	**0.9%**	**2.0%**	**0.2%**	**0.1%**
1989r	40.5	30.4	25.8	0.9	2.1	0.2	0.1
1988	40.9	30.3	25.6	0.9	2.0	0.2	0.1
1987	40.5	30.0	26.1	1.0	2.1	0.2	0.1
1986	40.0	29.8	26.8	1.0	2.1	0.2	0.1
1985	39.3	29.5	27.8	1.0	2.1	0.2	0.1
1984	39.3	28.8	28.5	1.0	2.1	0.2	0.1
1983	39.5	28.6	28.3	1.0	2.2	0.3	0.1
1982	38.8	28.1	29.5	1.0	2.2	0.2	0.2
1981	38.6	28.2	29.7	1.1	2.0	0.2	0.2
1980	39.4	28.7	28.6	1.1	1.9	0.2	0.1
1979	38.7	28.0	29.9	1.1	1.9	0.2	0.2
1978	39.2	28.2	29.0	1.2	1.9	0.3	0.2
1977	39.4	28.8	28.2	1.2	2.0	0.2	0.2
1976	39.6	28.5	28.0	1.4	2.1	0.3	0.1
1975	40.1	28.8	27.1	1.4	2.1	0.4	0.1
1974	40.1	28.6	27.3	1.5	2.0	0.4	0.1
1973	41.6	28.9	25.5	1.6	2.0	0.3	0.1
1972	42.0	28.8	25.0	1.6	2.1	0.3	0.2
1971	42.4	28.6	24.8	1.7	2.1	0.3	0.1
1970	42.7	28.5	24.6	1.7	2.1	0.3	0.1

Based on revenue data in Table 56. p Preliminary. r Revised.

CHART VIII-B

REVENUES

TOTAL ELECTRIC UTILITY INDUSTRY
BY YEAR AND CLASS OF SERVICES
THOUSANDS OF DOLLARS



Based on Table 58, as shown above.

TABLE 59A

REVENUES
TOTAL ELECTRIC UTILITY INDUSTRY

BY STATE AND CLASS OF SERVICE
YEAR 1990p — THOUSANDS OF DOLLARS

State/Division	Total from Ultimate Customers	Residential	Commercial	Industrial	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Inter-departmental
Total United States	**$175,503,369**	**$71,174,435**	**$53,875,110**	**$44,778,020**	**$1,582,176**	**$3,593,659**	**$333,744**	**$166,225**
Maine	880,752	364,758	214,346	282,869	10,489	8,196	—	94
New Hampshire	783,197	346,927	186,341	236,502	7,247	6,179	—	—
Vermont	399,572	175,256	126,665	91,405	3,160	3,050	—	36
Massachusetts	4,009,094	1,499,806	1,585,412	803,079	59,539	51,989	9,269	—
Rhode Island	586,783	233,647	219,090	116,358	7,712	9,976	—	—
Connecticut	2,488,924	1,039,008	943,416	459,851	34,178	2,463	9,642	365
New England	**9,148,322**	**3,659,401**	**3,275,271**	**1,990,066**	**122,325**	**81,854**	**18,910**	**494**
New York	12,087,975	4,410,831	4,903,254	1,849,745	149,049	601,459	171,339	2,298
New Jersey	5,763,546	2,142,002	2,413,750	1,130,909	74,837	—	380	1,667
Pennsylvania	8,760,377	3,508,319	2,350,253	2,746,861	82,874	12,319	53,790	5,960
Middle Atlantic	**26,611,898**	**10,061,152**	**9,667,256**	**5,727,516**	**306,761**	**613,778**	**225,509**	**9,926**
Ohio	8,402,087	3,057,026	2,264,861	2,809,775	60,667	204,787	4,326	645
Indiana	3,808,731	1,493,398	924,594	1,339,956	32,740	14,141	1,127	2,775
Illinois	7,771,028	3,041,082	2,220,645	2,038,936	47,708	398,495	23,981	180
Michigan	5,764,912	1,966,268	1,658,999	2,028,211	60,888	47,809	—	2,736
Wisconsin	2,631,915	1,077,366	746,350	762,288	28,541	12,662	—	4,709
East North Central	**28,378,672**	**10,635,140**	**7,815,448**	**8,979,167**	**230,544**	**677,894**	**29,434**	**11,046**
Minnesota	2,492,139	1,008,813	465,741	976,002	21,836	19,559	—	188
Iowa	1,729,116	813,269	408,892	460,680	18,032	28,203	—	40
Missouri	3,363,956	1,543,884	1,181,963	576,299	29,016	31,811	272	711
North Dakota	396,971	184,104	122,899	72,915	7,100	9,843	—	111
South Dakota	386,859	199,285	104,275	71,160	5,921	6,218	—	1
Nebraska	976,850	417,811	334,423	186,631	15,459	21,957	—	569
Kansas	1,763,029	734,310	620,567	380,938	17,965	9,223	—	27
West North Central	**11,108,921**	**4,901,475**	**3,238,760**	**2,724,625**	**115,327**	**126,814**	**272**	**1,647**
Delaware	524,464	217,199	156,744	146,199	4,139	86	—	97
Maryland	3,117,921	1,380,081	697,000	985,817	39,958	354	12,076	2,633
District of Columbia	584,583	90,320	322,120	153,717	5,038	—	13,389	—
Virginia	4,365,832	2,033,527	1,231,634	683,191	38,184	379,295	—	—
West Virginia	1,093,240	445,737	266,789	373,228	6,270	1,216	—	—
North Carolina	5,639,733	2,559,327	1,494,190	1,468,360	33,806	81,764	—	2,286
South Carolina	3,066,601	1,286,095	716,924	1,022,296	11,658	29,050	—	579
Georgia	5,140,642	2,148,578	1,615,302	1,308,167	43,659	17,654	7,282	—
Florida	9,876,764	5,386,374	3,290,437	897,793	76,366	211,849	5,305	8,639
South Atlantic	**33,409,780**	**15,547,238**	**9,791,141**	**7,038,767**	**259,079**	**721,268**	**38,052**	**14,235**
Kentucky	2,925,447	953,726	483,174	1,192,895	14,993	278,790	—	1,868
Tennessee	3,958,344	1,655,285	409,332	1,858,216	28,217	2,903	—	4,391
Alabama	3,307,238	1,350,776	705,469	1,223,738	23,855	1,501	—	1,898
Mississippi	1,928,367	825,317	464,252	601,441	14,825	22,352	—	181
East South Central	**12,119,396**	**4,785,104**	**2,062,228**	**4,876,291**	**81,890**	**305,546**	**—**	**8,337**
Arkansas	1,808,625	847,126	429,319	499,739	10,811	21,629	—	—
Louisiana	3,753,378	1,530,526	916,230	1,123,346	28,161	103,508	—	51,608
Oklahoma	2,111,062	1,000,259	605,834	399,463	12,026	93,479	—	—
Texas	13,352,266	5,729,886	3,775,733	3,365,831	98,124	369,169	—	13,524
West South Central	**21,025,332**	**9,107,797**	**5,727,116**	**5,388,379**	**149,122**	**587,786**	**—**	**65,132**
Montana	509,543	182,243	136,557	180,464	6,321	3,223	—	735
Idaho	676,446	270,886	215,278	185,958	3,217	1,094	—	14
Wyoming	502,945	105,973	118,161	273,641	3,448	1,713	—	9
Colorado	1,763,208	676,846	780,622	270,912	23,869	10,959	—	—
New Mexico	979,322	318,544	382,210	225,300	8,279	42,255	—	2,734
Arizona	3,196,227	1,388,500	1,158,212	559,911	32,958	41,217	1,616	13,813
Utah	871,093	300,997	298,790	240,689	5,383	25,184	—	49
Nevada	870,148	318,999	242,553	284,206	5,512	18,878	—	—
Mountain	**9,368,933**	**3,562,989**	**3,332,382**	**2,221,080**	**88,988**	**144,524**	**1,616**	**17,353**
Washington	2,978,431	1,217,904	731,391	940,562	34,388	52,404	696	1,085
Oregon	1,711,747	688,201	536,932	467,080	14,352	2,798	—	2,385
California	18,542,625	6,629,090	7,310,290	4,110,752	164,788	273,890	19,254	34,561
Pacific	**23,232,802**	**8,535,195**	**8,578,613**	**5,518,394**	**213,528**	**329,091**	**19,951**	**38,030**
Alaska	349,468	140,840	163,573	30,805	9,121	5,103	—	25
Hawaii	749,845	238,103	223,320	282,930	5,492	—	—	—
Alaska & Hawaii	**1,099,313**	**378,944**	**386,893**	**313,735**	**14,613**	**5,103**	**—**	**25**

Note: Total may not equal sum of components due to independent rounding.
p Preliminary.

TABLE 59B

REVENUES
TOTAL ELECTRIC UTILITY INDUSTRY

BY STATE AND CLASS OF SERVICE
YEAR 1989r — THOUSANDS OF DOLLARS

State/Division	Total from Ultimate Customers	Residential	Commercial	Industrial	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Inter-departmental
Total United States	**$169,626,780**	**$68,760,042**	**$51,561,710**	**$43,745,803**	**$1,544,298**	**$3,518,362**	**$328,974**	**$167,591**
Maine	802,121	341,808	194,530	247,971	9,915	7,803	—	94
New Hampshire	746,708	338,542	176,870	218,690	6,953	5,654	—	—
Vermont	380,948	162,229	122,045	89,647	2,981	4,019	—	26
Massachusetts	3,794,331	1,447,642	1,478,161	753,598	56,020	50,503	8,406	—
Rhode Island	525,219	213,139	192,063	105,240	5,531	9,247	—	—
Connecticut	2,398,001	1,005,754	897,655	449,411	32,957	2,457	9,045	721
New England	**8,647,328**	**3,509,114**	**3,061,325**	**1,864,557**	**114,357**	**79,682**	**17,451**	**842**
New York	11,368,684	4,139,326	4,657,330	1,668,337	143,420	588,417	169,696	2,157
New Jersey	5,620,073	2,089,365	2,312,871	1,140,432	75,136	—	439	1,831
Pennsylvania	8,355,943	3,372,089	2,201,887	2,633,615	82,610	9,284	50,883	5,576
Middle Atlantic	**25,344,700**	**9,600,780**	**9,172,087**	**5,442,384**	**301,165**	**597,701**	**221,018**	**9,563**
Ohio	8,099,645	3,018,767	2,152,137	2,659,438	61,917	202,682	4,169	536
Indiana	3,821,798	1,525,767	929,697	1,315,092	33,285	14,098	1,138	2,720
Illinois	8,155,156	3,197,329	2,332,736	2,116,930	49,938	430,313	27,750	159
Michigan	5,593,348	1,908,605	1,581,286	1,994,906	58,787	46,986	—	2,779
Wisconsin	2,621,859	1,072,799	740,568	762,355	28,498	12,828	—	4,810
East North Central	**28,291,808**	**10,723,267**	**7,736,424**	**8,848,721**	**232,425**	**706,908**	**33,058**	**11,004**
Minnesota	2,448,982	1,001,817	455,189	949,846	21,136	20,784	—	209
Iowa	1,691,560	784,438	403,981	455,222	18,562	29,318	—	39
Missouri	3,304,121	1,512,454	1,159,282	571,384	28,787	31,182	275	757
North Dakota	397,213	186,422	106,009	87,584	7,060	10,031	—	108
South Dakota	382,035	199,187	114,193	56,171	5,934	6,548	—	1
Nebraska	958,150	410,045	332,231	179,834	14,166	21,234	—	639
Kansas	1,663,966	685,695	589,296	362,343	17,442	9,145	—	45
West North Central	**10,846,025**	**4,780,059**	**3,160,182**	**2,662,384**	**113,087**	**128,241**	**275**	**1,798**
Delaware	506,905	213,369	150,041	139,644	3,661	86	—	104
Maryland	2,944,909	1,307,680	664,428	921,666	37,872	354	11,198	1,711
District of Columbia	567,358	38,260	311,229	150,211	4,777	—	12,882	—
Virginia	4,349,335	2,039,380	1,208,999	684,626	37,117	379,214	—	—
West Virginia	1,090,015	449,923	266,355	366,206	6,279	1,252	—	—
North Carolina	5,467,592	2,502,354	1,420,990	1,430,860	32,133	78,861	—	2,394
South Carolina	3,029,680	1,258,483	696,371	1,034,038	11,448	28,821	—	519
Georgia	4,915,569	2,058,777	1,539,211	1,250,893	41,902	17,745	7,042	—
Florida	9,493,030	5,158,089	3,155,521	890,057	73,608	201,698	5,046	9,013
South Atlantic	**32,364,396**	**15,076,314**	**9,413,145**	**6,868,200**	**248,797**	**708,031**	**36,167**	**13,741**
Kentucky	3,021,994	951,230	468,868	1,331,571	14,513	253,840	—	1,973
Tennessee	3,863,055	1,629,580	386,859	1,812,190	28,096	2,879	—	3,451
Alabama	3,214,374	1,299,257	678,564	1,210,108	23,230	1,406	—	1,808
Mississippi	1,833,022	787,685	444,840	564,752	14,350	21,192	—	202
East South Central	**11,932,444**	**4,667,753**	**1,979,131**	**4,918,621**	**80,188**	**279,318**	**—**	**7,434**
Arkansas	1,686,337	783,579	398,679	471,546	10,092	22,441	—	—
Louisiana	3,638,503	1,468,132	886,510	1,097,576	27,521	99,383	—	59,381
Oklahoma	2,021,301	952,539	581,912	386,799	12,171	87,879	—	—
Texas	12,748,837	5,387,352	3,614,588	3,286,258	94,983	352,823	—	12,833
West South Central	**20,094,978**	**8,591,603**	**5,481,688**	**5,242,180**	**144,767**	**562,526**	**—**	**72,214**
Montana	522,732	185,000	132,113	195,056	6,448	3,286	—	829
Idaho	672,163	274,653	208,100	186,799	1,519	1,089	—	3
Wyoming	496,373	106,228	115,796	268,846	3,425	1,656	—	423
Colorado	1,756,855	673,009	774,620	274,679	23,345	10,500	—	702
New Mexico	965,506	311,731	375,398	223,678	8,132	43,657	—	2,911
Arizona	3,042,137	1,348,057	1,077,913	533,158	32,214	41,065	1,616	8,115
Utah	902,426	307,688	312,534	247,921	5,582	28,651	—	50
Nevada	784,419	296,147	226,082	241,110	5,282	15,794	—	4
Mountain	**9,142,612**	**3,502,513**	**3,222,556**	**2,171,246**	**85,947**	**145,698**	**1,616**	**13,037**
Washington	3,009,082	1,205,768	705,732	1,015,405	26,766	53,453	691	1,268
Oregon	1,688,387	682,318	527,912	459,484	14,287	2,760	—	1,625
California	17,272,399	6,072,082	6,744,105	3,984,750	168,684	249,035	18,698	35,044
Pacific	**21,969,868**	**7,960,169**	**7,977,749**	**5,459,639**	**209,737**	**305,249**	**19,389**	**37,936**
Alaska	350,567	141,101	164,310	30,970	9,157	5,007	—	22
Hawaii	642,055	207,369	193,114	236,902	4,671	—	—	—
Alaska & Hawaii	**992,622**	**348,470**	**357,423**	**267,871**	**13,827**	**5,007**	**—**	**22**

Note: Total may not equal sum of components due to independent rounding.
r Revised.

TABLE 60A

REVENUES
INVESTOR-OWNED ELECTRIC UTILITIES

BY STATE AND CLASS OF SERVICE
YEAR 1990p — THOUSANDS OF DOLLARS

State/Division	Total from Ultimate Customers	Residential	Commercial	Industrial	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Inter-departmental
Total United States	**$139,447,850**	**$54,537,660**	**$45,587,467**	**$35,267,284**	**$1,237,385**	**$2,551,694**	**$163,490**	**$102,870**
Maine	854,226	350,830	209,615	275,824	10,169	7,788	—	—
New Hampshire	722,575	310,326	167,959	231,318	6,834	6,138	—	—
Vermont	322,917	139,114	116,078	63,193	2,455	2,076	—	—
Massachusetts	3,458,491	1,302,213	1,462,876	599,731	52,624	31,778	9,269	
Rhode Island	582,970	231,376	218,510	115,418	7,693	9,972	—	
Connecticut	2,365,442	1,001,426	909,670	411,782	32,923	—	9,642	
New England	**8,306,620**	**3,335,285**	**3,084,709**	**1,697,266**	**112,698**	**57,752**	**18,910**	**—**
New York	11,284,005	4,348,443	4,881,618	1,706,694	96,197	244,399	4,356	2,298
New Jersey	5,651,381	2,092,389	2,385,896	1,096,990	74,059	—	380	1,667
Pennsylvania	8,520,946	3,342,317	2,307,363	2,718,307	82,185	11,024	53,790	5,960
Middle Atlantic	**25,456,332**	**9,783,149**	**9,574,877**	**5,521,990**	**252,441**	**255,423**	**58,526**	**9,926**
Ohio	7,786,300	2,722,532	2,141,384	2,665,815	56,770	194,827	4,326	645
Indiana	3,152,894	1,098,667	820,123	1,193,153	28,584	8,465	1,127	2,775
Illinois	7,261,639	2,746,560	2,083,905	1,977,230	46,255	383,529	23,981	180
Michigan	5,272,373	1,766,889	1,498,984	1,909,834	53,706	40,265	—	2,696
Wisconsin	2,223,792	869,798	675,217	642,383	24,449	10,138	—	1,806
East North Central	**25,696,998**	**9,204,446**	**7,219,613**	**8,388,415**	**209,763**	**637,224**	**29,434**	**8,103**
Minnesota	1,673,322	508,106	289,715	845,453	17,487	12,373	—	188
Iowa	1,320,652	553,649	354,168	377,715	16,603	18,476	—	40
Missouri	2,570,675	1,059,508	990,404	478,430	24,696	17,554	—	83
North Dakota	216,208	93,640	67,907	48,362	3,386	2,803	—	111
South Dakota	219,870	89,903	67,641	58,240	2,630	1,455	—	1
Nebraska	—	—	—	—	—	—	—	—
Kansas	1,268,544	520,813	443,541	287,468	15,360	1,336	—	27
West North Central	**7,269,271**	**2,825,619**	**2,213,376**	**2,095,668**	**80,162**	**53,996**	**—**	**450**
Delaware	418,337	161,538	133,168	119,829	3,705	—	—	97
Maryland	2,923,469	1,258,119	648,933	967,585	34,123	—	12,076	2,633
District of Columbia	584,583	90,320	322,120	153,717	5,038	—	13,389	—
Virginia	3,822,058	1,703,955	1,139,214	571,336	35,913	371,640	—	—
West Virginia	1,086,623	441,562	265,179	372,601	6,270	1,011	—	—
North Carolina	4,222,577	1,701,838	1,165,688	1,266,940	25,842	61,967	—	303
South Carolina	2,151,041	789,889	541,389	787,501	8,577	23,106	—	579
Georgia	3,615,753	1,196,228	1,283,903	1,092,066	31,314	4,960	7,282	—
Florida	7,778,498	4,250,511	2,669,221	602,638	57,679	184,504	5,305	8,639
South Atlantic	**26,602,939**	**11,593,960**	**8,168,813**	**5,934,214**	**208,461**	**647,187**	**38,052**	**12,252**
Kentucky	1,506,141	493,390	360,193	364,110	11,020	277,387	—	40
Tennessee	65,683	25,981	13,976	23,930	418	1,377	—	—
Alabama	2,166,962	825,645	551,634	777,580	11,906	—	—	197
Mississippi	1,050,313	404,865	330,492	283,761	10,773	20,242	—	181
East South Central	**4,789,099**	**1,749,881**	**1,256,295**	**1,449,381**	**34,117**	**299,006**	**—**	**418**
Arkansas	1,294,262	543,144	329,323	393,516	9,355	18,923	—	—
Louisiana	3,210,112	1,181,899	821,201	1,029,223	27,939	98,243	—	51,608
Oklahoma	1,563,209	675,731	456,601	327,905	11,668	91,303	—	—
Texas	10,838,648	4,446,716	3,063,843	2,987,224	80,796	259,180	—	889
West South Central	**16,906,231**	**6,847,490**	**4,670,969**	**4,737,867**	**129,758**	**467,650**	**—**	**52,497**
Montana	339,544	118,043	103,226	109,362	5,433	2,760	—	720
Idaho	585,964	226,001	186,193	170,629	2,994	133	—	14
Wyoming	343,556	61,875	59,908	219,054	1,963	747	—	9
Colorado	1,147,058	408,879	567,575	147,954	17,908	4,742	—	—
New Mexico	715,311	233,135	271,497	165,593	6,908	36,560	—	1,618
Arizona	1,868,343	780,877	709,932	349,123	15,196	13,216	—	—
Utah	667,243	236,802	204,986	199,194	4,515	21,721	—	25
Nevada	809,337	303,915	225,840	255,736	5,403	18,441	—	—
Mountain	**6,476,356**	**2,369,527**	**2,329,158**	**1,616,646**	**60,319**	**98,320**	**—**	**2,386**
Washington	1,244,476	637,191	416,750	178,825	11,062	1	—	646
Oregon	1,288,646	533,175	445,437	294,499	13,406	8	—	2,121
California	14,631,426	5,406,677	5,976,615	3,061,715	119,524	34,255	18,567	14,072
Pacific	**17,164,548**	**6,577,044**	**6,838,803**	**3,535,039**	**143,992**	**34,265**	**18,567**	**16,840**
Alaska	29,611	13,156	7,534	7,869	182	871	—	—
Hawaii	749,845	238,103	223,320	282,930	5,492	—	—	—
Alaska & Hawaii	**779,456**	**251,259**	**230,854**	**290,799**	**5,674**	**871**	**—**	**—**

Note: Total may not equal the sum of components due to independent rounding.
p Preliminary.

TABLE 60B

REVENUES
INVESTOR-OWNED ELECTRIC UTILITIES

BY STATE AND CLASS OF SERVICE
YEAR 1989r — THOUSANDS OF DOLLARS

State/Division	Total from Ultimate Customers	Residential	Commercial	Industrial	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Inter-departmental
Total United States	**$133,878,029**	**$52,325,314**	**$43,440,937**	**$34,132,516**	**$1,212,529**	**$2,499,378**	**$158,725**	**$108,631**
Maine	775,968	327,734	189,978	241,249	9,598	7,409	—	—
New Hampshire	685,189	300,763	158,386	213,857	6,556	5,627	—	—
Vermont	304,268	126,332	111,692	61,212	2,331	2,701	—	—
Massachusetts	3,267,733	1,257,256	1,360,797	561,197	50,801	29,276	8,406	—
Rhode Island	521,712	211,025	191,554	104,375	5,512	9,244	—	—
Connecticut	2,278,677	969,949	865,740	402,162	31,782	—	9,045	—
New England	**7,833,546**	**3,193,059**	**2,878,147**	**1,584,051**	**106,580**	**54,258**	**17,451**	**—**
New York	10,562,600	4,076,366	4,635,008	1,524,656	90,538	231,162	2,713	2,157
New Jersey	5,512,359	2,040,818	2,285,919	1,108,915	74,437	—	439	1,831
Pennsylvania	8,116,512	3,206,086	2,158,997	2,605,061	81,920	7,989	50,883	5,576
Middle Atlantic	**24,191,471**	**9,323,271**	**9,079,925**	**5,238,632**	**246,896**	**239,150**	**54,035**	**9,563**
Ohio	7,483,859	2,684,274	2,028,660	2,515,478	58,020	192,722	4,169	536
Indiana	3,170,011	1,132,124	825,943	1,170,407	29,089	8,590	1,138	2,720
Illinois	7,647,587	2,903,007	2,197,360	2,055,272	48,486	415,552	27,750	159
Michigan	5,099,275	1,709,226	1,422,080	1,874,039	51,759	39,393	—	2,779
Wisconsin	2,214,716	865,402	669,499	643,187	24,404	10,332	—	1,892
East North Central	**25,615,448**	**9,294,033**	**7,143,542**	**8,258,383**	**211,757**	**666,589**	**33,058**	**8,086**
Minnesota	1,630,156	501,100	279,193	819,297	16,788	13,569	—	209
Iowa	1,283,096	524,818	349,258	372,257	17,133	19,590	—	39
Missouri	2,522,641	1,033,251	975,005	472,456	24,604	17,240	—	84
North Dakota	216,921	95,958	51,017	63,031	3,346	3,462	—	108
South Dakota	214,774	89,805	77,559	43,251	2,644	1,514	—	1
Nebraska	—	—	—	—	—	—	—	—
Kansas	1,171,236	472,646	412,598	269,792	14,855	1,300	—	45
West North Central	**7,038,823**	**2,717,578**	**2,144,630**	**2,040,085**	**79,369**	**56,676**	**—**	**485**
Delaware	400,778	157,708	126,465	113,274	3,227	—	—	104
Maryland	2,750,457	1,185,717	616,361	903,434	32,037	—	11,198	1,711
District of Columbia	567,358	88,260	311,229	150,211	4,777	—	12,882	—
Virginia	3,807,592	1,710,514	1,117,603	572,802	34,977	371,696	—	—
West Virginia	1,083,398	445,748	264,745	365,579	6,279	1,047	—	—
North Carolina	4,059,650	1,647,611	1,095,041	1,233,259	24,301	59,130	—	309
South Carolina	2,114,120	762,278	520,835	799,243	8,368	22,877	—	519
Georgia	3,393,482	1,107,893	1,209,201	1,034,719	29,566	5,060	7,042	—
Florida	7,456,644	4,054,074	2,553,849	604,952	55,328	174,383	5,046	9,013
South Atlantic	**25,633,479**	**11,159,803**	**7,815,329**	**5,777,474**	**198,858**	**634,192**	**36,167**	**11,655**
Kentucky	1,447,953	490,230	348,862	345,793	10,584	252,438	—	47
Tennessee	66,898	27,192	14,302	23,584	413	1,408	—	—
Alabama	2,089,486	781,982	533,487	762,274	11,516	—	—	227
Mississippi	996,165	374,910	315,510	276,129	10,356	19,107	—	153
East South Central	**4,600,501**	**1,674,314**	**1,212,160**	**1,407,779**	**32,869**	**272,953**	**—**	**427**
Arkansas	1,171,974	479,597	298,683	365,322	8,636	19,735	—	—
Louisiana	3,095,237	1,119,506	791,481	1,003,453	27,299	94,117	—	59,381
Oklahoma	1,473,448	628,011	432,678	315,242	11,812	85,704	—	—
Texas	10,273,356	4,118,824	2,919,610	2,913,583	77,607	242,875	—	857
West South Central	**16,014,015**	**6,345,938**	**4,442,452**	**4,597,600**	**125,355**	**442,431**	**—**	**60,239**
Montana	338,546	120,800	98,782	109,745	5,560	2,855	—	804
Idaho	581,681	229,768	179,016	171,470	1,297	128	—	3
Wyoming	337,030	62,130	57,543	214,258	1,939	735	—	423
Colorado	1,134,996	403,201	560,198	149,267	17,455	4,875	—	—
New Mexico	701,964	226,323	264,685	163,971	6,760	38,431	—	1,795
Arizona	1,768,023	749,311	648,759	342,721	14,192	13,040	—	—
Utah	698,842	243,492	218,731	206,425	4,714	25,454	—	26
Nevada	724,648	281,063	209,276	213,753	5,173	15,383	—	—
Mountain	**6,285,730**	**2,316,088**	**2,236,990**	**1,571,610**	**57,089**	**100,901**	**—**	**3,051**
Washington	1,186,936	621,647	395,431	158,469	10,559	1	—	829
Oregon	1,271,084	530,328	439,883	286,143	13,359	8	—	1,361
California	13,535,953	4,928,955	5,452,230	2,967,373	124,998	31,449	18,014	12,934
Pacific	**15,993,973**	**6,080,930**	**6,287,545**	**3,411,986**	**148,916**	**31,458**	**18,014**	**15,124**
Alaska	28,986	12,932	7,104	8,014	169	768	—	—
Hawaii	642,055	207,369	193,114	236,902	4,671	—	—	—
Alaska & Hawaii	**671,042**	**220,300**	**200,218**	**244,916**	**4,840**	**768**	**—**	**—**

Note: Total may not equal sum of components due to independent rounding.
r Revised.

TABLE 61

REVENUES
TOTAL ELECTRIC UTILITY INDUSTRY

BY QUARTER AND CLASS OF SERVICE
1985 - 1990 — THOUSANDS OF DOLLARS

Year — Quarter	Total from Ultimate Customers	Residential	Commercial	Industrial	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Inter-departmental
YEAR — 1990p								
First Quarter	$ 41,559,088	$17,466,388	$12,297,005	$ 10,405,040	$ 395,902	$ 873,314	$ 82,227	$ 39,213
Second Quarter	40,776,202	15,639,337	12,838,007	10,936,403	386,201	853,203	78,073	44,978
Third Quarter	51,091,773	21,629,645	15,602,755	12,368,327	392,644	964,976	87,514	45,912
Fourth Quarter	42,076,306	16,439,065	13,137,343	11,068,250	407,429	902,167	85,929	36,122
Total	**$175,503,369**	**$71,174,435**	**$53,875,110**	**$44,778,020**	**$1,582,176**	**$3,593,659**	**$333,744**	**$166,225**
YEAR — 1989r								
First Quarter	$ 40,510,844	$17,152,976	$11,800,480	$10,214,383	$ 382,550	$ 837,335	$ 80,278	$ 42,840
Second Quarter	39,882,091	15,261,865	12,431,332	10,827,174	380,510	858,464	78,359	44,387
Third Quarter	48,467,832	20,226,324	14,821,465	11,952,515	390,193	940,849	86,324	50,163
Fourth Quarter	40,766,014	16,118,877	12,508,433	10,751,730	391,045	881,714	84,012	30,201
Total	**$169,626,780**	**$68,760,042**	**$51,561,710**	**$43,745,803**	**$1,544,298**	**$3,518,362**	**$328,974**	**$167,591**
YEAR — 1988								
First Quarter	$ 39,016,776	$16,609,748	$11,367,297	$ 9,745,162	$ 375,630	$ 806,241	$ 72,820	$ 39,878
Second Quarter	37,228,913	14,195,361	11,643,545	10,103,272	374,611	800,063	70,981	41,080
Third Quarter	47,508,839	20,425,241	14,339,204	11,350,597	375,715	892,538	79,181	46,363
Fourth Quarter	38,633,330	15,172,189	11,791,099	10,362,271	377,843	809,472	73,233	47,223
Total	**$162,387,858**	**$66,402,539**	**$49,141,145**	**$41,561,302**	**$1,503,799**	**$3,308,314**	**$296,215**	**$174,544**
YEAR — 1987								
First Quarter	$ 36,911,176	$15,538,031	$10,723,967	$ 9,365,935	$ 374,345	$ 781,436	$ 78,582	$ 48,879
Second Quarter	36,781,292	14,105,104	11,280,178	10,080,790	386,840	803,299	72,248	52,832
Third Quarter	45,058,203	19,146,820	13,469,845	11,050,602	372,533	889,609	76,886	51,907
Fourth Quarter	36,949,564	14,259,104	11,271,117	10,133,281	375,527	798,914	73,919	37,702
Total	**$155,700,236**	**$63,049,059**	**$46,745,107**	**$40,630,608**	**$1,509,246**	**$3,273,260**	**$301,635**	**$191,321**
YEAR — 1986								
First Quarter	$ 37,653,132	$15,555,169	$10,724,906	$10,047,285	$ 384,848	$ 801,638	$ 83,113	$ 56,171
Second Quarter	35,577,168	13,238,115	10,967,967	10,112,652	363,391	772,993	74,248	47,802
Third Quarter	43,036,318	17,967,869	12,873,376	10,821,908	379,282	856,022	77,953	59,908
Fourth Quarter	36,200,506	14,149,450	10,844,037	9,924,209	370,909	783,510	76,657	51,733
Total	**$152,467,123**	**$60,910,603**	**$45,410,286**	**$40,906,054**	**$1,498,431**	**$3,214,164**	**$311,971**	**$215,614**
YEAR — 1985								
First Quarter	$ 36,754,335	$15,166,967	$10,267,363	$10,046,679	$ 374,536	$ 768,455	$ 79,540	$ 50,797
Second Quarter	35,007,556	12,809,647	10,584,167	10,360,169	360,647	774,643	72,559	45,725
Third Quarter	41,420,795	16,852,682	12,406,550	10,822,584	370,430	836,349	81,215	50,985
Fourth Quarter	35,979,667	13,762,456	10,802,475	10,138,415	370,479	784,027	79,852	41,963
Total	**$149,162,352**	**$58,591,751**	**$44,060,554**	**$41,367,847**	**$1,476,092**	**$3,163,473**	**$313,165**	**$189,470**

Note: Total may not equal sum of components due to independent rounding.
p Preliminary. r Revised.

TABLE 62

REVENUES
INVESTOR-OWNED ELECTRIC UTILITIES

BY QUARTER AND CLASS OF SERVICE
1985 - 1990 — THOUSANDS OF DOLLARS

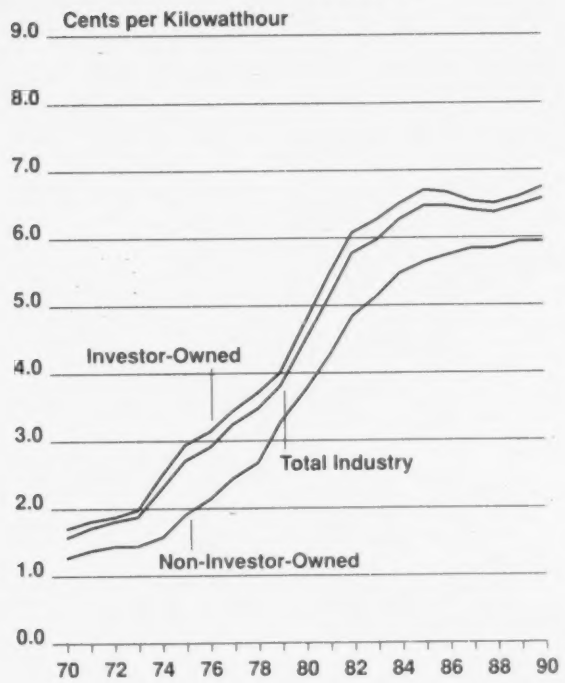
Year — Quarter	Total from Ultimate Customers	Residential	Commercial	Industrial	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Inter-depart-mental
YEAR — 1990p								
First Quarter	$ 32,887,566	$13,363,383	$10,389,184	$ 8,138,484	$ 309,920	$ 620,636	$ 39,361	$ 26,599
Second Quarter	32,381,395	11,974,205	10,831,680	8,601,418	304,546	603,629	38,359	27,558
Third Quarter	40,543,426	16,479,435	13,221,397	9,776,290	304,566	691,284	44,182	26,272
Fourth Quarter	33,635,462	12,720,637	11,145,206	8,751,092	318,353	636,146	41,587	22,441
Total	**$139,447,850**	**$54,537,660**	**$45,587,467**	**$35,267,284**	**$1,237,385**	**$2,551,694**	**$163,490**	**$102,870**
YEAR — 1989r								
First Quarter	$ 31,804,758	$13,007,953	$ 9,914,745	$ 7,925,593	$ 301,705	$ 588,499	$ 37,109	$ 29,154
Second Quarter	31,496,177	11,632,728	10,465,522	8,421,900	300,116	608,721	37,290	29,898
Third Quarter	38,302,758	15,352,666	12,527,818	9,367,986	304,277	673,727	42,552	33,732
Fourth Quarter	32,274,336	12,331,967	10,532,851	8,417,037	306,430	628,430	41,774	15,847
Total	**$133,878,029**	**$52,325,314**	**$43,440,937**	**$34,132,516**	**$1,212,529**	**$2,499,378**	**$158,725**	**$108,631**
YEAR — 1988								
First Quarter	$ 30,586,173	$12,527,596	$ 9,517,873	$ 7,613,950	$ 296,877	$ 568,046	$ 34,928	$ 26,903
Second Quarter	29,529,510	10,825,823	9,766,111	8,012,865	294,898	567,262	36,094	26,457
Third Quarter	37,670,370	15,538,788	12,079,763	9,046,994	293,534	639,658	41,923	29,710
Fourth Quarter	30,454,303	11,580,278	9,873,402	8,065,573	295,837	568,740	37,206	33,266
Total	**$128,240,356**	**$50,472,485**	**$41,237,149**	**$32,739,382**	**$1,181,146**	**$2,343,706**	**$150,151**	**$116,336**
YEAR — 1987								
First Quarter	$ 29,191,233	$11,800,957	$ 9,036,665	$ 7,431,625	$ 297,824	$ 549,082	$ 38,253	$ 36,828
Second Quarter	29,218,560	10,756,656	9,518,678	7,990,445	309,364	568,263	36,243	38,911
Third Quarter	35,718,875	14,535,734	11,393,379	8,780,918	293,624	641,314	37,062	36,844
Fourth Quarter	29,184,191	10,868,726	9,488,438	7,907,738	297,601	562,040	35,778	23,871
Total	**$123,312,860**	**$47,962,072**	**$39,437,160**	**$32,110,727**	**$1,198,413**	**$2,320,698**	**$147,336**	**$136,454**
YEAR — 1986								
First Quarter	$ 29,895,007	$11,835,967	$ 9,061,657	$ 8,028,150	$ 304,671	$ 578,054	$ 42,513	$ 43,995
Second Quarter	28,374,923	10,096,138	9,292,294	8,064,825	285,522	563,399	37,802	34,943
Third Quarter	34,075,844	13,538,755	10,889,298	8,642,478	298,067	624,166	38,258	44,822
Fourth Quarter	28,728,696	10,771,084	9,139,116	7,882,870	289,695	568,473	38,272	39,186
Total	**$121,074,470**	**$46,241,943**	**$38,382,364**	**$32,618,323**	**$1,177,956**	**$2,334,092**	**$156,846**	**$162,947**
YEAR — 1985								
First Quarter	$ 29,132,718	$11,519,273	$ 8,657,938	$ 8,031,567	$ 296,484	$ 548,544	$ 40,254	$ 38,660
Second Quarter	28,019,118	9,807,508	8,969,446	8,322,627	282,255	568,360	35,839	33,082
Third Quarter	33,012,579	12,802,412	10,512,910	8,721,651	292,695	605,980	41,028	35,903
Fourth Quarter	28,671,857	10,522,068	9,101,226	8,128,371	288,267	562,899	40,608	28,418
Total	**$118,836,272**	**$44,651,261**	**$37,241,520**	**$33,204,216**	**$1,159,701**	**$2,285,783**	**$157,728**	**$136,064**

Note: Total may not equal sum of components due to independent rounding.
p Preliminary. r Revised.

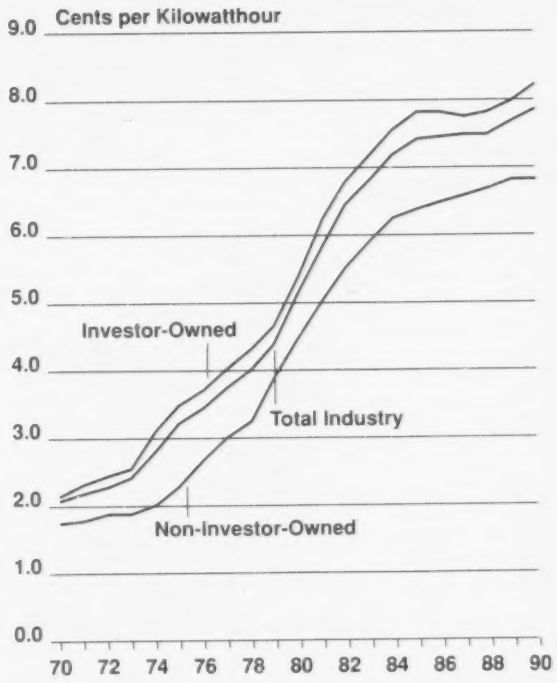
CHART VIII-C

AVERAGE REVENUES PER KWH SOLD

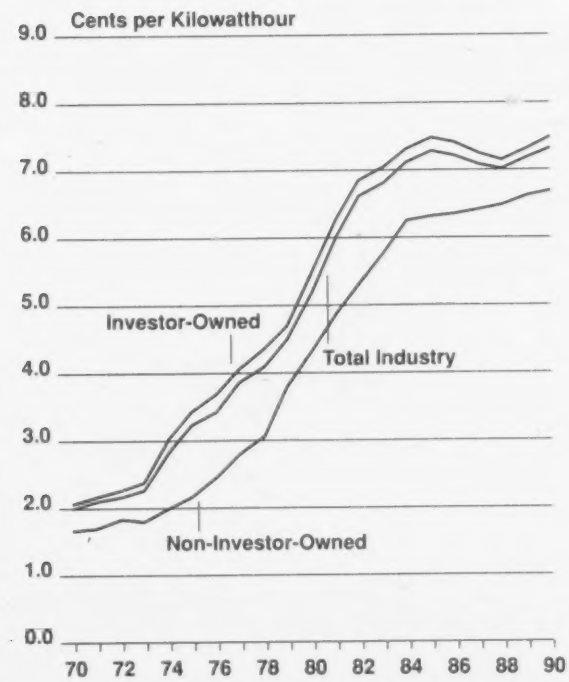
TOTAL ULTIMATE CUSTOMERS



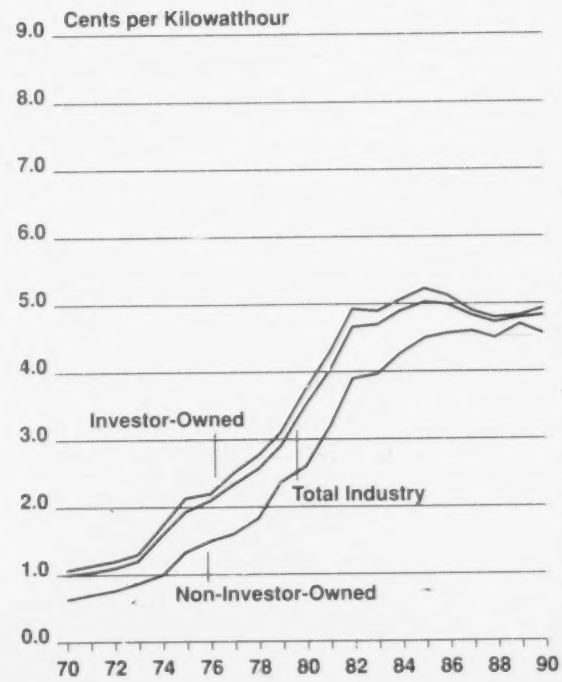
RESIDENTIAL CUSTOMERS



COMMERCIAL CUSTOMERS



INDUSTRIAL CUSTOMERS



Based on sales data in Tables 38 and 39, page 43, and revenue data in Tables 56 and 57, page 64

TABLE 63

AVERAGE REVENUES PER KILOWATTHOUR SOLD TOTAL ELECTRIC UTILITY INDUSTRY

CENTS PER KILOWATTHOUR

Year	Residential	Commercial	Industrial	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Total Ultimate Customers
1990p	**7.82¢**	**7.33¢**	**4.83¢**	**10.63¢**	**4.96¢**	**6.30¢**	**6.58¢**
1989r	7.65	7.20	4.79	10.60	5.07	6.21	6.47
1988	7.49	7.04	4.71	10.29	5.12	5.83	6.36
1987	7.45	7.10	4.82	10.49	5.19	6.16	6.39
1986	7.43	7.22	4.99	9.96	5.19	6.65	6.47
1985	7.39	7.27	5.04	10.08	5.09	6.66	6.47
1984	7.17	7.14	4.88	9.69	5.08	6.75	6.27
1983	6.83	6.80	4.68	9.50	5.00	6.90	6.00
1982	6.44	6.61	4.66	8.81	4.72	6.80	5.79
1981	5.86	6.00	4.03	7.96	4.18	5.67	5.16
1980	5.12	5.22	3.44	7.02	3.75	4.86	4.49
1979	4.43	4.50	2.91	6.21	3.06	4.43	3.82
1978	4.03	4.10	2.59	5.74	2.73	3.92	3.46
1977	3.78	3.84	2.33	5.39	2.69	3.46	3.21
1976	3.45	3.46	2.07	5.03	2.44	3.78	2.89
1975	3.21	3.23	1.92	4.74	2.24	3.72	2.70
1974	2.83	2.85	1.55	4.31	1.92	3.43	2.30
1973	2.38	2.30	1.17	3.83	1.47	2.20	1.86
1972	2.29	2.22	1.09	3.69	1.37	1.92	1.77
1971	2.19	2.12	1.03	3.53	1.29	1.72	1.69
1970	2.10	2.01	0.95	3.38	1.20	1.49	1.59

Based on sales data in Table 38 and revenue data in Table 56. p Preliminary. r Revised.

TABLE 64

AVERAGE REVENUES PER KILOWATTHOUR SOLD INVESTOR-OWNED ELECTRIC UTILITIES

CENTS PER KILOWATTHOUR

Year	Residential	Commercial	Industrial	Street and Highway Lighting	Other Public Authorities	Railroads and Railways	Total Ultimate Customers
1990p	**8.17¢**	**7.47¢**	**4.92¢**	**11.84¢**	**5.00¢**	**6.58¢**	**6.77¢**
1989r	7.95	7.33	4.83	11.61	5.16	6.40	6.62
1988	7.78	7.16	4.77	11.36	5.28	6.26	6.51
1987	7.75	7.24	4.88	11.53	5.37	6.58	6.56
1986	7.78	7.40	5.12	11.38	5.43	6.94	6.70
1985	7.79	7.47	5.20	11.22	5.25	7.00	6.72
1984	7.53	7.33	5.07	10.78	5.26	6.97	6.52
1983	7.15	7.04	4.90	10.13	5.22	6.55	6.27
1982	6.81	6.86	4.91	9.54	4.80	6.77	6.10
1981	6.19	6.28	4.29	8.55	4.36	6.20	5.45
1980	5.36	5.47	3.68	7.58	3.95	5.17	4.72
1979	4.63	4.68	3.06	6.60	3.33	3.80	3.99
1978	4.31	4.36	2.80	6.18	2.96	3.59	3.70
1977	4.06	4.10	2.52	5.79	2.90	3.68	3.44
1976	3.73	3.69	2.23	5.43	2.69	3.82	3.11
1975	3.51	3.46	2.09	5.14	2.51	3.79	2.94
1974	3.09	3.05	1.70	4.66	2.17	3.48	2.50
1973	2.54	2.42	1.26	4.12	1.61	2.22	1.97
1972	2.42	2.30	1.17	3.95	1.50	1.94	1.86
1971	2.32	2.21	1.11	3.78	1.42	1.73	1.78
1970	2.22	2.09	1.03	3.62	1.33	1.51	1.68

Based on sales data in Table 39 and revenue data in Table 57. p Preliminary. r Revised.

TABLE 65

AVERAGE ANNUAL REVENUE PER CUSTOMER

TOTAL ELECTRIC UTILITY INDUSTRY

Year	Total Ultimate Customers	Residential	Commercial	Industrial
1990p	**$1,609.65**	**$740.60**	**$4,478.30**	**$85,600.77**
1989r	1,576.46	724.50	4,362.81	85,945.62
1988	1,536.46	711.78	4,255.93	84,088.95
1987	1,500.59	687.95	4,146.61	82,826.13
1986	1,493.81	675.17	4,126.94	81,176.66
1985	1,481.57	658.11	4,080.42	80,621.32
1984	1,452.62	643.75	3,939.57	81,118.33
1983	1,348.80	601.77	3,660.14	73,275.14
1982	1,285.29	563.09	3,452.36	66,668.67
1981	1,188.44	517.39	3,206.52	67,266.27
1980	1,040.22	461.81	2,848.00	N/A
1979	897.17	391.30	2,394.04	N/A
1978	807.12	356.74	2,176.91	N/A
1977	739.86	328.93	2,031.41	N/A
1976	646.33	288.39	1,754.26	N/A
1975	579.03	262.26	1,579.55	N/A
1974	493.43	223.73	1,327.40	N/A
1973	408.14	192.35	1,096.55	N/A
1972	371.01	176.39	988.78	N/A
1971	336.46	161.49	888.75	N/A
1970	307.36	148.58	803.54	N/A

INVESTOR-OWNED ELECTRIC UTILITIES

Year	Total Ultimate Customers	Residential	Commercial	Industrial
1990p	**$1,666.51**	**$739.91**	**$4,913.97**	**$89,885.47**
1989r	1,625.50	720.74	4,777.05	90,211.75
1988	1,584.24	706.82	4,638.54	88,899.76
1987	1,551.79	683.65	4,547.63	88,447.85
1986	1,553.65	671.60	4,548.55	88,389.35
1985	1,555.15	661.10	4,522.66	88,394.19
1984	1,511.99	640.47	4,346.35	82,193.29
1983	1,397.10	599.44	4,011.41	75,219.20
1982	1,338.79	562.54	3,867.11	74,322.38
1981	1,239.87	514.38	3,499.79	N/A
1980	1,083.26	457.29	3,022.55	N/A
1979	928.41	387.34	2,555.09	N/A
1978	858.50	363.56	2,384.37	N/A
1977	789.43	336.24	2,234.30	N/A
1976	692.11	297.14	1,942.05	N/A
1975	626.39	275.86	1,763.39	N/A
1974	534.25	234.33	1,474.97	N/A
1973	433.66	197.38	1,197.68	N/A
1972	391.66	179.49	1,071.15	N/A
1971	354.57	163.64	961.77	N/A
1970	321.42	149.42	861.21	N/A

Based on revenue data in Tables 56 and 57, and average number of customers per year.
p Preliminary. r Revised. N/A Not Available.

TABLE 66A
REVENUE AND USE PER TOTAL ULTIMATE CUSTOMER
BY STATE — 1990p

State/Division	Total Electric Utility Industry			Investor-Owned Electric Utilities		
	Avg. Annual Revenue per Customer	Avg. Revenue per kWh Sold	Avg. Annual kWh Use per Customer	Avg. Annual Revenue per Customer	Avg. Revenue per kWh Sold	Avg. Annual kWh Use per Customer
Total United States	**$ 1,609.65**	**6.58¢**	**24,463**	**$ 1,666.51**	**6.77¢**	**24,627**
Maine	1,391.86	7.64	18,209	1,403.06	7.61	18,429
New Hampshire	1,397.37	9.06	15,429	1,475.93	9.13	16,173
Vermont	1,357.98	8.10	16,757	1,419.12	8.04	17,642
Massachusetts	1,532.01	8.83	17,348	1,508.72	8.75	17,233
Rhode Island	1,349.21	9.14	14,759	1,352.46	9.13	14,819
Connecticut	1,731.16	9.17	18,888	1,721.28	9.24	18,626
New England	**1,530.58**	**8.79**	**17,412**	**1,531.58**	**8.78**	**17,450**
New York	1,698.28	9.35	18,159	1,621.61	10.02	16,180
New Jersey	1,734.56	9.11	19,036	1,741.27	9.12	19,092
Pennsylvania	1,685.21	7.64	22,072	1,719.86	7.61	22,591
Middle Atlantic	**1,701.64**	**8.66**	**19,646**	**1,679.34**	**8.89**	**18,899**
Ohio	1,790.85	5.94	30,157	1,881.56	5.92	31,778
Indiana	1,571.09	5.58	28,167	1,691.26	5.44	31,084
Illinois	1,617.20	7.00	23,100	1,643.97	6.97	23,575
Michigan	1,417.61	7.02	20,180	1,460.14	7.08	20,630
Wisconsin	1,170.70	5.40	21,699	1,188.41	5.36	22,170
East North Central	**1,556.19**	**6.28**	**24,765**	**1,615.99**	**6.27**	**25,756**
Minnesota	1,281.23	5.32	24,064	1,412.77	4.91	28,752
Iowa	1,327.63	5.91	22,459	1,392.43	5.82	23,920
Missouri	1,419.45	6.52	21,758	1,612.75	6.65	24,264
North Dakota	1,282.49	5.74	22,359	1,095.13	5.71	19,192
South Dakota	1,176.99	6.06	19,425	1,242.40	6.30	19,707
Nebraska	1,242.56	5.55	22,383	—	—	—
Kansas	1,485.20	6.58	22,566	1,600.82	6.48	24,701
West North Central	**1,350.00**	**5.99**	**22,520**	**1,485.44**	**5.95**	**24,985**
Delaware	1,678.70	6.37	26,358	1,834.78	6.20	29,577
Maryland	1,622.16	6.30	25,765	1,648.52	6.27	26,293
District of Columbia	2,672.89	5.94	45,030	2,672.89	5.94	45,030
Virginia	1,674.49	6.04	27,741	1,739.06	5.96	29,187
West Virginia	1,278.27	4.73	27,019	1,282.85	4.72	27,173
North Carolina	1,763.12	6.43	27,412	1,935.75	6.13	31,603
South Carolina	1,893.23	5.64	33,591	2,174.46	5.60	38,809
Georgia	1,747.04	6.49	26,917	2,165.97	6.37	34,012
Florida	1,532.68	7.06	21,720	1,537.12	6.92	22,225
South Atlantic	**1,660.46**	**6.37**	**26,058**	**1,754.20**	**6.23**	**28,154**
Kentucky	1,741.36	4.82	36,141	1,548.33	3.94	39,290
Tennessee	1,732.06	5.24	33,039	1,708.08	4.16	41,092
Alabama	1,760.53	5.58	31,559	1,921.76	5.69	33,773
Mississippi	1,698.65	6.10	27,865	2,004.19	6.44	31,114
East South Central	**1,736.53**	**5.34**	**32,546**	**1,798.48**	**5.08**	**35,371**
Arkansas	1,573.95	6.70	23,487	1,813.61	6.89	26,335
Louisiana	2,082.71	5.97	34,863	2,305.93	5.77	39,963
Oklahoma	1,364.72	5.61	24,337	1,488.14	5.24	28,415
Texas	1,846.01	5.77	32,012	2,041.66	5.63	36,288
West South Central	**1,792.26**	**5.86**	**30,603**	**1,997.20**	**5.69**	**35,076**
Montana	1,244.27	3.96	31,419	1,127.27	4.25	26,499
Idaho	1,424.82	3.78	37,689	1,474.76	3.71	39,794
Wyoming	2,075.52	4.22	49,189	2,226.27	3.81	58,477
Colorado	1,114.76	5.85	19,049	1,131.63	5.81	19,480
New Mexico	1,464.63	7.29	20,096	1,508.26	7.19	20,971
Arizona	2,002.72	7.75	25,828	2,052.32	8.47	24,238
Utah	1,380.89	5.49	25,152	1,370.86	5.38	25,471
Nevada	1,552.73	5.39	28,807	1,523.39	5.65	26,943
Mountain	**1,519.92**	**5.87**	**25,872**	**1,517.02**	**5.82**	**26,068**
Washington	1,372.84	3.48	39,434	1,228.19	4.88	25,193
Oregon	1,341.50	4.17	32,166	1,279.63	4.60	27,799
California	1,555.30	8.82	17,629	1,567.67	9.37	16,739
Pacific	**1,511.79**	**6.90**	**21,914**	**1,511.82**	**8.18**	**18,474**
Alaska	1,577.25	8.61	18,312	1,748.09	9.35	18,692
Hawaii	2,044.86	9.02	22,663	2,044.86	9.02	22,663
Alaska & Hawaii	**1,868.74**	**8.89**	**21,025**	**2,031.76**	**9.03**	**22,488**

p Preliminary

TABLE 66B

REVENUE AND USE PER TOTAL ULTIMATE CUSTOMER

BY STATE — 1989r

State/Division	Total Electric Utility Industry			Investor-Owned Electric Utilities		
	Avg. Annual Revenue per Customer	Avg. Revenue per kWh Sold	Avg. Annual kWh Use per Customer	Avg. Annual Revenue per Customer	Avg. Revenue per kWh Sold	Avg. Annual kWh Use per Customer
Total United States	**$ 1,576.46**	**6.47¢**	**24,359**	**$ 1,625.50**	**6.62¢**	**24,543**
Maine	1,277.96	7.01	18,236	1,292.98	6.97	18,560
New Hampshire	1,347.43	8.54	15,778	1,415.61	8.56	16,539
Vermont	1,312.69	7.66	17,138	1,355.01	7.47	18,148
Massachusetts	1,466.16	8.32	17,632	1,440.45	8.22	17,528
Rhode Island	1,224.37	8.26	14,824	1,227.14	8.24	14,885
Connecticut	1,679.93	8.77	19,155	1,670.49	8.83	18,909
New England	**1,461.59**	**8.28**	**17,662**	**1,459.72**	**8.24**	**17,722**
New York	1,611.79	8.83	18,245	1,532.08	9.43	16,252
New Jersey	1,710.21	8.82	19,400	1,717.72	8.82	19,465
Pennsylvania	1,624.71	7.34	22,146	1,656.74	7.31	22,675
Middle Atlantic	**1,636.97**	**8.27**	**19,786**	**1,612.49**	**8.47**	**19,037**
Ohio	1,743.60	5.73	30,451	1,828.95	5.69	32,130
Indiana	1,592.12	5.68	28,027	1,722.52	5.57	30,946
Illinois	1,714.44	7.48	22,933	1,750.18	7.48	23,398
Michigan	1,392.54	6.75	20,635	1,431.54	6.77	21,133
Wisconsin	1,189.64	5.44	21,878	1,212.17	5.41	22,404
East North Central	**1,569.75**	**6.30**	**24,908**	**1,632.50**	**6.30**	**25,931**
Minnesota	1,271.94	5.34	23,838	1,399.60	4.92	28,454
Iowa	1,303.47	5.91	22,066	1,359.53	5.81	23,387
Missouri	1,406.05	6.53	21,542	1,599.39	6.66	24,019
North Dakota	1,285.08	5.78	22,221	1,101.16	5.74	19,176
South Dakota	1,171.66	6.03	19,419	1,231.87	6.35	19,415
Nebraska	1,227.60	5.52	22,238	—	—	—
Kansas	1,412.18	6.45	21,885	1,434.56	6.29	23,760
West North Central	**1,328.03**	**5.98**	**22,223**	**1,454.07**	**5.92**	**24,558**
Delaware	1,651.02	6.31	26,182	1,800.38	6.12	29,412
Maryland	1,561.54	5.98	26,118	1,583.26	5.93	26,687
District of Columbia	2,629.43	5.88	44,736	2,629.43	5.88	44,736
Virginia	1,699.41	5.93	28,638	1,770.42	5.84	30,290
West Virginia	1,285.31	4.77	26,919	1,290.00	4.76	27,073
North Carolina	1,735.34	6.33	27,430	1,902.05	5.99	31,738
South Carolina	1,892.93	5.65	33,508	2,179.54	5.62	38,774
Georgia	1,691.45	6.37	26,562	2,075.20	6.19	33,515
Florida	1,508.83	6.99	21,584	1,516.26	6.84	22,153
South Atlantic	**1,637.45**	**6.27**	**26,112**	**1,729.25**	**6.11**	**28,302**
Kentucky	1,814.92	5.17	35,126	1,508.02	4.05	37,279
Tennessee	1,718.93	5.25	32,762	1,763.53	4.20	41,941
Alabama	1,731.43	5.55	31,214	1,875.94	5.68	33,030
Mississippi	1,631.46	6.18	26,412	1,925.70	6.42	30,015
East South Central	**1,731.23**	**5.43**	**31,881**	**1,749.74**	**5.13**	**34,117**
Arkansas	1,475.96	6.41	23,026	1,657.51	6.47	25,617
Louisiana	2,027.30	5.95	34,088	2,235.31	5.73	38,985
Oklahoma	1,312.63	5.57	23,560	1,412.09	5.17	27,296
Texas	1,791.53	5.67	31,407	1,959.44	5.51	35,532
West South Central	**1,727.37**	**5.77**	**29,959**	**1,911.39**	**5.58**	**34,240**
Montana	1,283.29	4.09	31,353	1,132.12	4.25	26,622
Idaho	1,441.13	3.79	38,037	1,495.39	3.71	40,256
Wyoming	2,049.14	4.31	47,547	2,185.24	3.91	55,900
Colorado	1,118.55	5.96	18,780	1,131.03	5.91	19,134
New Mexico	1,463.77	7.35	19,909	1,508.90	7.25	20,826
Arizona	1,939.82	7.52	25,799	1,985.35	8.18	24,279
Utah	1,449.73	5.80	25,011	1,460.82	5.76	25,353
Nevada	1,499.05	5.28	28,413	1,466.46	5.54	26,460
Mountain	**1,508.62**	**5.88**	**25,668**	**1,505.91**	**5.82**	**25,863**
Washington	1,418.87	3.58	39,637	1,207.37	4.77	25,292
Oregon	1,350.65	4.27	31,648	1,293.42	4.68	27,635
California	1,475.24	8.46	17,440	1,485.19	8.99	16,515
Pacific	**1,456.98**	**6.70**	**21,740**	**1,443.53**	**7.90**	**18,280**
Alaska	1,581.90	8.68	18,215	1,722.72	9.24	18,646
Hawaii	1,790.28	8.06	22,224	1,790.28	8.06	22,224
Alaska & Hawaii	**1,710.69**	**8.27**	**20,693**	**1,787.25**	**8.10**	**22,064**

r Revised

TABLE 67A
REVENUE AND USE PER RESIDENTIAL CUSTOMER
BY STATE — 1990p

State/Division	Total Electric Utility Industry			Investor-Owned Electric Utilities		
	Avg. Annual Revenue per Customer	Avg. Revenue per kWh Sold	Avg. Annual kWh Use per Customer	Avg. Annual Revenue per Customer	Avg. Revenue per kWh Sold	Avg. Annual kWh Use per Customer
Total United States	**$ 740.60**	**7.82¢**	**9,472**	**$ 739.91**	**8.17¢**	**9,056**
Maine	649.53	9.29	6,995	648.75	9.27	6,995
New Hampshire	714.16	10.06	7,100	732.36	10.29	7,116
Vermont	682.02	8.71	7,827	702.82	8.84	7,950
Massachusetts	649.44	9.65	6,733	644.51	9.71	6,637
Rhode Island	604.56	9.83	6,149	604.14	9.82	6,153
Connecticut	797.16	10.01	7,963	802.64	10.06	7,977
New England	**689.99**	**9.71**	**7,107**	**692.89**	**9.78**	**7,082**
New York	704.38	11.42	6,166	710.34	11.73	6,056
New Jersey	735.29	10.39	7,080	735.59	10.41	7,069
Pennsylvania	757.28	9.20	8,236	758.33	9.20	8,245
Middle Atlantic	**728.65**	**10.33**	**7,053**	**731.53**	**10.46**	**6,993**
Ohio	727.62	8.08	9,005	735.26	8.28	8,880
Indiana	690.15	6.84	10,091	666.29	6.79	9,818
Illinois	699.98	9.34	7,492	688.49	9.47	7,270
Michigan	536.87	7.76	6,915	543.73	7.82	6,953
Wisconsin	539.69	6.66	8,107	521.47	6.68	7,804
East North Central	**649.73**	**7.95**	**8,170**	**645.54**	**8.10**	**7,973**
Minnesota	579.10	6.79	8,528	487.00	6.59	7,388
Iowa	717.18	7.78	9,214	680.90	8.15	8,354
Missouri	735.85	7.35	10,010	757.11	7.62	9,931
North Dakota	704.28	6.16	11,439	565.91	6.09	9,290
South Dakota	703.21	6.86	10,249	604.80	7.39	8,185
Nebraska	640.83	6.20	10,338	—	—	—
Kansas	722.47	7.85	9,203	752.19	7.77	9,680
West North Central	**681.96**	**7.18**	**9,502**	**662.92**	**7.46**	**8,881**
Delaware	773.51	8.23	9,393	789.11	8.40	9,394
Maryland	798.65	7.22	11,065	789.75	7.22	10,936
District of Columbia	470.49	6.10	7,711	470.49	6.10	7,711
Virginia	877.44	7.25	12,101	873.85	7.21	12,125
West Virginia	595.93	5.89	10,110	596.10	5.88	10,135
North Carolina	918.57	7.75	11,847	912.80	7.53	12,130
South Carolina	913.55	7.18	12,723	939.03	7.18	13,087
Georgia	819.41	7.34	11,159	817.13	7.50	10,899
Florida	943.61	7.80	12,090	948.17	7.74	12,246
South Atlantic	**873.90**	**7.47**	**11,694**	**869.58**	**7.41**	**11,734**
Kentucky	647.60	5.67	11,428	588.72	5.30	11,101
Tennessee	836.06	5.71	14,629	758.16	4.74	15,983
Alabama	826.73	6.58	12,571	843.50	6.88	12,256
Mississippi	843.18	6.89	12,230	907.88	7.35	12,347
East South Central	**788.94**	**6.11**	**12,910**	**761.77**	**6.40**	**11,908**
Arkansas	844.46	8.05	10,490	888.56	8.46	10,508
Louisiana	963.89	7.37	13,070	966.95	7.25	13,341
Oklahoma	748.30	6.84	10,941	742.21	6.56	11,312
Texas	911.52	7.20	12,660	963.64	7.25	13,293
West South Central	**891.71**	**7.26**	**12,285**	**930.56**	**7.26**	**12,825**
Montana	534.14	5.38	9,919	473.80	5.30	8,939
Idaho	679.43	4.85	14,012	680.85	4.83	14,090
Wyoming	536.10	6.04	8,882	481.74	5.94	8,105
Colorado	490.39	6.94	7,062	455.05	7.09	6,421
New Mexico	556.65	8.99	6,191	562.68	8.77	6,414
Arizona	979.43	9.05	10,823	970.12	9.54	10,165
Utah	536.84	7.09	7,567	543.57	7.38	7,362
Nevada	655.87	5.78	11,338	656.91	5.81	11,302
Mountain	**665.39**	**7.25**	**9,173**	**636.01**	**7.18**	**8,855**
Washington	632.65	4.46	14,187	709.39	5.22	13,580
Oregon	621.19	4.73	13,122	610.90	4.86	12,560
California	632.93	9.97	6,347	660.57	10.48	6,303
Pacific	**631.93**	**7.88**	**8,020**	**660.62**	**8.80**	**7,508**
Alaska	744.53	8.78	8,481	930.46	9.25	10,057
Hawaii	752.41	10.26	7,334	752.41	10.26	7,334
Alaska & Hawaii	**749.46**	**9.65**	**7,763**	**760.03**	**10.20**	**7,451**

p Preliminary.

TABLE 67B

REVENUE AND USE PER RESIDENTIAL CUSTOMER

BY STATE — 1989r

State/Division	Total Electric Utility Industry			Investor-Owned Electric Utilities		
	Avg. Annual Revenue per Customer	Avg. Revenue per kWh Sold	Avg. Annual kWh Use per Customer	Avg. Annual Revenue per Customer	Avg. Revenue per kWh Sold	Avg. Annual kWh Use per Customer
Total United States	**$ 724.50**	**7.65¢**	**9,470**	**$ 720.74**	**7.95¢**	**9,063**
Maine	612.39	8.52	7,189	613.76	8.49	7,231
New Hampshire	703.40	9.54	7,371	716.42	9.69	7,394
Vermont	639.26	7.86	8,134	645.68	7.70	8,389
Massachusetts	631.01	9.08	6,947	625.43	9.12	6,857
Rhode Island	557.88	8.99	6,203	557.33	8.98	6,209
Connecticut	776.64	9.59	8,095	782.66	9.64	8,122
New England	**666.57**	**9.13**	**7,297**	**668.34**	**9.17**	**7,285**
New York	666.73	10.78	6,187	671.77	11.05	6,077
New Jersey	723.77	10.04	7,209	724.14	10.06	7,200
Pennsylvania	735.14	8.84	8,317	735.05	8.82	8,331
Middle Atlantic	**701.70**	**9.86**	**7,116**	**703.74**	**9.97**	**7,058**
Ohio	725.24	7.78	9,320	732.64	7.93	9,236
Indiana	711.51	6.93	10,271	694.98	6.91	10,059
Illinois	743.13	9.94	7,474	735.31	10.15	7,246
Michigan	527.06	7.53	6,999	532.63	7.56	7,048
Wisconsin	547.97	6.68	8,205	531.07	6.71	7,916
East North Central	**662.41**	**7.98**	**8,301**	**660.11**	**8.13**	**8,122**
Minnesota	580.22	6.77	8,576	487.48	6.54	7,450
Iowa	693.98	7.58	9,153	648.33	7.84	8,266
Missouri	726.31	7.34	9,896	745.74	7.62	9,784
North Dakota	713.88	6.14	11,636	580.87	6.05	9,597
South Dakota	708.30	6.84	10,351	613.10	7.34	8,350
Nebraska	633.50	6.15	10,301	—	—	—
Kansas	679.31	7.70	8,818	688.52	7.54	9,128
West North Central	**669.63**	**7.10**	**9,425**	**643.81**	**7.35**	**8,761**
Delaware	772.97	8.14	9,494	788.72	8.27	9,532
Maryland	770.67	6.86	11,237	759.18	6.83	11,120
District of Columbia	466.42	6.02	7,748	466.42	6.02	7,748
Virginia	895.58	6.98	12,827	895.74	6.89	12,995
West Virginia	605.68	5.91	10,257	605.96	5.89	10,284
North Carolina	910.62	7.63	11,932	901.96	7.36	12,253
South Carolina	903.32	7.20	12,548	922.23	7.21	12,798
Georgia	794.58	7.22	11,010	773.59	7.27	10,644
Florida	926.10	7.74	11,958	931.14	7.68	12,130
South Atlantic	**862.30**	**7.34**	**11,747**	**856.11**	**7.24**	**11,824**
Kentucky	648.24	5.61	11,547	591.95	5.21	11,366
Tennessee	825.14	5.71	14,458	804.93	4.80	16,778
Alabama	799.28	6.58	12,148	807.50	6.89	11,717
Mississippi	807.29	6.84	11,802	851.19	7.22	11,791
East South Central	**772.35**	**6.08**	**12,701**	**737.33**	**6.31**	**11,679**
Arkansas	784.76	7.72	10,163	790.64	7.93	9,969
Louisiana	928.44	7.33	12,671	920.86	7.18	12,823
Oklahoma	715.90	6.81	10,506	694.49	6.51	10,674
Texas	865.74	6.98	12,396	904.15	6.98	12,949
West South Central	**847.87**	**7.08**	**11,971**	**871.45**	**7.03**	**12,397**
Montana	543.38	5.38	10,099	486.29	5.30	9,183
Idaho	699.78	4.86	14,408	705.40	4.84	14,568
Wyoming	537.14	6.05	8,872	483.38	5.97	8,091
Colorado	491.02	7.01	7,002	453.22	7.16	6,327
New Mexico	552.69	8.99	6,147	557.30	8.77	6,357
Arizona	968.51	8.85	10,944	952.96	9.28	10,266
Utah	555.57	7.39	7,513	567.87	7.79	7,289
Nevada	653.08	5.74	11,381	654.06	5.76	11,346
Mountain	**665.30**	**7.23**	**9,206**	**635.73**	**7.16**	**8,879**
Washington	640.56	4.45	14,395	712.74	5.18	13,750
Oregon	628.37	4.80	13,100	622.33	4.96	12,553
California	592.87	9.45	6,276	616.58	9.87	6,249
Pacific	**602.59**	**7.54**	**7,994**	**625.72**	**8.37**	**7,475**
Alaska	745.33	8.79	8,482	920.20	9.15	10,060
Hawaii	670.19	9.26	7,236	670.19	9.26	7,236
Alaska & Hawaii	**698.71**	**9.06**	**7,709**	**681.05**	**9.26**	**7,358**

r Revised.

TABLE 68A
REVENUE AND USE PER COMMERCIAL CUSTOMER
BY STATE -- 1990p

State/Division	Total Electric Utility Industry			Investor-Owned Electric Utilities		
	Avg. Annual Revenue per Customer	Avg. Revenue per kWh Sold	Avg. Annual kWh Use per Customer	Avg. Annual Revenue per Customer	Avg. Revenue per kWh Sold	Avg. Annual kWh Use per Customer
Total United States	**$ 4,478.30**	**7.33¢**	**61,061**	**$ 4,913.97**	**7.47¢**	**65,796**
Maine	3,204.85	8.02	39,956	3,280.21	8.00	40,993
New Hampshire	2,588.46	9.30	27,828	2,657.54	9.38	28,332
Vermont	3,566.73	8.48	42,048	4,021.69	8.44	47,640
Massachusetts	5,522.55	8.55	64,559	5,717.66	8.46	67,611
Rhode Island	4,883.31	8.92	54,722	4,908.36	8.92	55,051
Connecticut	7,522.42	9.12	82,480	7,717.50	9.12	84,646
New England	**5,184.50**	**8.73**	**59,362**	**5,372.11**	**8.69**	**61,844**
New York	5,999.79	10.48	57,249	6,093.90	10.57	57,676
New Jersey	6,216.95	8.99	69,154	6,278.08	8.96	69,911
Pennsylvania	4,453.35	8.07	55,167	4,517.43	8.07	55,965
Middle Atlantic	**5,577.56**	**9.41**	**59,282**	**5,659.34**	**9.45**	**59,908**
Ohio	5,109.92	7.50	68,176	5,460.46	7.53	72,487
Indiana	3,849.87	6.06	63,545	4,109.06	6.01	68,323
Illinois	5,064.73	7.27	69,714	5,108.11	7.29	70,027
Michigan	4,316.94	8.07	53,487	4,358.84	8.27	52,696
Wisconsin	3,095.60	5.63	54,958	3,451.78	5.80	59,482
East North Central	**4,473.02**	**7.11**	**62,871**	**4,690.44**	**7.19**	**65,220**
Minnesota	2,517.03	6.04	41,646	2,266.23	5.82	38,958
Iowa	2,614.33	6.30	41,502	2,793.81	6.31	44,254
Missouri	4,698.29	6.48	72,552	5,478.71	6.62	82,767
North Dakota	2,737.42	6.48	42,226	2,282.52	6.29	36,306
South Dakota	2,499.51	6.66	37,506	2,536.12	6.98	36,325
Nebraska	2,633.44	6.03	43,688	—	—	—
Kansas	3,931.37	6.62	59,386	4,857.53	6.45	75,334
West North Central	**3,358.08**	**6.37**	**52,704**	**3,795.79**	**6.42**	**59,131**
Delaware	5,151.65	6.85	75,218	5,870.83	6.70	87,681
Maryland	3,821.88	6.71	56,932	3,837.66	6.71	57,208
District of Columbia	12,138.05	6.35	191,166	12,138.05	6.35	191,166
Virginia	4,795.64	6.08	78,831	5,229.40	6.00	87,206
West Virginia	2,798.82	5.36	52,230	2,810.14	5.35	52,544
North Carolina	3,871.53	6.38	60,672	3,928.91	6.14	64,008
South Carolina	3,555.29	6.16	57,722	3,857.78	6.11	63,174
Georgia	5,550.73	7.36	75,462	6,750.67	7.33	92,119
Florida	4,764.56	6.65	71,699	4,958.62	6.50	76,253
South Atlantic	**4,531.49**	**6.55**	**69,191**	**4,816.38**	**6.43**	**74,948**
Kentucky	2,607.89	5.37	48,587	3,060.19	5.13	59,636
Tennessee	1,462.41	6.52	22,427	3,611.44	4.90	73,683
Alabama	3,054.92	6.79	44,997	3,861.98	6.73	57,419
Mississippi	3,200.44	7.28	43,959	4,634.00	7.31	63,383
East South Central	**2,451.64**	**6.44**	**38,098**	**3,741.99**	**6.27**	**59,651**
Arkansas	3,576.41	6.99	51,193	4,146.76	6.97	59,532
Louisiana	4,936.00	7.12	69,373	5,674.41	7.03	80,772
Oklahoma	3,297.72	5.92	55,731	3,920.80	5.55	70,660
Texas	4,423.20	6.19	71,404	5,017.68	6.10	82,214
West South Central	**4,264.43**	**6.35**	**67,173**	**4,910.60**	**6.24**	**78,686**
Montana	2,241.73	4.72	47,537	2,287.72	4.51	50,773
Idaho	2,992.17	4.22	70,844	3,020.89	4.18	72,208
Wyoming	2,904.71	5.26	55,259	2,626.74	4.96	52,993
Colorado	3,937.03	5.72	68,858	4,968.01	5.47	90,835
New Mexico	4,230.33	8.13	52,026	4,997.19	8.32	60,085
Arizona	7,172.66	8.11	88,433	7,184.02	8.88	80,865
Utah	4,965.18	6.29	78,883	4,916.45	6.27	78,396
Nevada	3,330.31	6.12	54,412	3,328.32	6.22	53,525
Mountain	**4,404.10**	**6.46**	**68,174**	**4,598.45**	**6.38**	**72,030**
Washington	3,166.99	4.15	76,268	3,931.46	5.13	76,665
Oregon	3,354.12	4.72	71,026	3,506.02	5.02	69,888
California	5,286.32	9.47	55,833	5,355.23	9.81	54,587
Pacific	**4,836.04**	**8.08**	**59,864**	**5,069.21**	**8.78**	**57,763**
Alaska	5,423.34	8.52	63,651	3,527.12	11.61	30,370
Hawaii	4,652.69	10.18	45,719	4,652.69	10.18	45,719
Alaska & Hawaii	**4,950.08**	**9.40**	**52,639**	**4,604.74**	**10.22**	**45,065**

p Preliminary.

TABLE 68B
REVENUE AND USE PER COMMERCIAL CUSTOMER
BY STATE — 1989r

State/Division	Total Electric Utility Industry			Investor-Owned Electric Utilities		
	Avg. Annual Revenue per Customer	Avg. Revenue per kWh Sold	Avg. Annual kWh Use per Customer	Avg. Annual Revenue per Customer	Avg. Revenue per kWh Sold	Avg. Annual kWh Use per Customer
Total United States	**$ 4,362.81**	**7.20¢**	**60,576**	**$ 4,777.05**	**7.33¢**	**65,212**
Maine	2,967.39	7.36	40,325	3,044.27	7.33	41,525
New Hampshire	2,527.39	8.78	28,779	2,580.04	8.80	29,324
Vermont	3,535.39	8.15	43,364	3,968.16	8.08	49,138
Massachusetts	5,397.90	8.11	66,519	5,608.20	8.01	70,015
Rhode Island	4,431.85	8.00	55,391	4,460.25	7.99	55,796
Connecticut	7,263.29	8.73	83,157	7,455.82	8.72	85,469
New England	**5,011.80**	**8.26**	**60,652**	**5,198.51**	**8.20**	**63,369**
New York	5,768.93	9.91	58,202	5,858.61	9.99	58,660
New Jersey	6,113.08	8.73	70,017	6,175.09	8.72	70,803
Pennsylvania	4,247.47	7.77	54,665	4,305.78	7.76	55,461
Middle Atlantic	**5,382.49**	**9.01**	**59,749**	**5,460.80**	**9.04**	**60,399**
Ohio	4,935.81	7.24	68,213	5,269.81	7.26	72,609
Indiana	3,935.31	6.15	64,004	4,212.55	6.12	68,843
Illinois	5,396.63	7.81	69,072	5,466.67	7.88	69,354
Michigan	4,207.94	7.83	53,717	4,233.50	8.00	52,909
Wisconsin	3,142.55	5.69	55,182	3,520.25	5.88	59,884
East North Central	**4,508.48**	**7.17**	**62,886**	**4,733.71**	**7.25**	**65,264**
Minnesota	2,495.54	6.04	41,332	2,229.96	5.80	38,449
Iowa	2,599.37	6.45	40,315	2,776.73	6.49	42,810
Missouri	4,688.99	6.49	72,231	5,475.16	6.64	82,435
North Dakota	2,390.38	6.59	36,251	1,746.97	6.44	27,121
South Dakota	2,747.92	6.46	42,515	2,925.76	6.62	44,170
Nebraska	2,635.73	5.99	44,024	—	—	—
Kansas	3,776.31	6.53	57,866	4,664.92	6.30	74,026
West North Central	**3,315.84**	**6.37**	**52,060**	**3,741.39**	**6.42**	**58,248**
Delaware	5,039.84	6.73	74,938	5,741.10	6.55	87,673
Maryland	3,750.70	6.64	56,489	3,761.21	6.63	56,738
District of Columbia	11,814.48	6.29	187,699	11,814.48	6.29	187,699
Virginia	4,835.18	6.05	79,913	5,276.12	5.96	88,505
West Virginia	2,853.02	5.42	52,629	2,865.14	5.41	52,953
North Carolina	3,773.24	6.33	59,635	3,804.63	6.07	62,722
South Carolina	3,533.60	6.22	56,812	3,836.50	6.18	62,036
Georgia	5,387.13	7.29	73,866	6,436.65	7.25	88,804
Florida	4,661.07	6.60	70,619	4,865.64	6.46	75,321
South Atlantic	**4,454.78**	**6.51**	**68,454**	**4,728.59**	**6.38**	**74,121**
Kentucky	2,662.70	5.33	49,996	3,025.58	5.09	59,452
Tennessee	1,563.84	6.42	24,348	3,710.85	5.01	73,997
Alabama	3,120.34	6.79	45,981	3,820.23	6.74	56,683
Mississippi	3,264.52	7.21	45,247	4,523.89	7.23	62,587
East South Central	**2,546.50**	**6.39**	**39,876**	**3,689.43**	**6.24**	**59,111**
Arkansas	3,359.47	6.72	50,025	3,826.91	6.61	57,903
Louisiana	4,789.85	7.06	67,860	5,489.57	6.96	78,871
Oklahoma	3,173.46	5.86	54,193	3,726.42	5.45	68,275
Texas	4,287.26	6.12	70,090	4,809.69	6.02	79,931
West South Central	**4,120.88**	**6.26**	**65,798**	**4,699.19**	**6.14**	**76,519**
Montana	2,207.77	4.68	47,126	2,242.71	4.46	50,293
Idaho	2,968.66	4.27	69,547	2,994.22	4.23	70,730
Wyoming	2,837.23	5.29	53,610	2,508.32	5.01	50,072
Colorado	3,932.68	5.84	67,324	4,956.54	5.61	88,422
New Mexico	4,184.66	8.13	51,444	4,930.06	8.33	59,208
Arizona	6,699.69	7.91	84,653	6,569.18	8.68	75,640
Utah	5,235.70	6.74	77,696	5,307.72	6.92	76,670
Nevada	3,291.57	6.02	54,711	3,284.97	6.11	53,754
Mountain	**4,315.74**	**6.47**	**66,669**	**4,499.55**	**6.42**	**70,036**
Washington	3,097.05	4.11	75,428	3,758.64	4.95	75,886
Oregon	3,293.07	4.70	70,056	3,450.72	5.02	68,725
California	4,809.90	9.09	52,900	5,005.20	9.46	52,916
Pacific	**4,456.06**	**7.78**	**57,304**	**4,756.10**	**8.45**	**56,268**
Alaska	5,466.60	8.66	63,127	3,366.65	11.38	29,590
Hawaii	4,106.88	9.21	44,614	4,106.88	9.21	44,614
Alaska & Hawaii	**4,637.11**	**8.95**	**51,833**	**4,075.09**	**9.27**	**43,969**

r Revised.

TABLE 69A
REVENUE AND USE PER INDUSTRIAL CUSTOMER
BY STATE — 1990p

State/Division	Total Electric Utility Industry			Investor-Owned Electric Utilities		
	Avg. Annual Revenue per Customer	Avg. Revenue per kWh Sold	Avg. Annual kWh Use per Customer	Avg. Annual Revenue per Customer	Avg. Revenue per kWh Sold	Avg. Annual kWh Use per Customer
Total United States	**$ 85,600.77**	**4.83¢**	**1,770,513**	**$ 89,885.47**	**4.92¢**	**1,828,276**
Maine	99,078.46	5.96	1,663,513	101,182.71	5.93	1,707,104
New Hampshire	145,361.02	7.66	1,898,349	146,496.53	7.69	1,905,322
Vermont	85,907.32	6.59	1,303,727	475,138.23	6.05	7,351,932
Massachusetts	64,519.92	7.87	819,995	72,370.07	7.52	962,969
Rhode Island	44,360.74	8.36	530,487	44,340.31	8.34	531,797
Connecticut	97,220.18	7.57	1,283,581	89,693.22	7.70	1,165,228
New England	**78,515.97**	**7.40**	**1,061,090**	**85,208.38**	**7.25**	**1,175,778**
New York	150,056.40	5.77	2,598,594	172,323.68	6.64	2,594,287
New Jersey	91,869.13	7.39	1,242,645	91,545.50	7.40	1,236,859
Pennsylvania	91,911.31	5.97	1,539,757	92,563.32	5.96	1,552,221
Middle Atlantic	**105,047.70**	**6.14**	**1,712,067**	**107,737.74**	**6.41**	**1,679,853**
Ohio	92,722.68	4.07	2,278,680	95,265.53	4.04	2,359,756
Indiana	88,609.69	4.39	2,020,397	101,813.54	4.32	2,358,717
Illinois	296,961.29	5.08	5,846,092	325,899.10	5.06	6,436,341
Michigan	143,630.85	5.81	2,473,436	148,671.50	5.84	2,546,512
Wisconsin	148,305.11	4.09	3,628,146	226,111.55	3.95	5,729,906
East North Central	**125,491.49**	**4.64**	**2,701,792**	**136,494.65**	**4.62**	**2,956,836**
Minnesota	109,087.08	4.14	2,638,082	124,734.90	4.03	3,092,207
Iowa	111,221.62	3.99	2,789,411	161,762.42	3.87	4,178,360
Missouri	56,268.24	5.06	1,112,280	58,189.04	5.17	1,126,502
North Dakota	51,384.62	4.74	1,084,323	38,970.05	4.58	851,368
South Dakota	54,992.42	4.52	1,217,961	78,596.28	4.66	1,685,263
Nebraska	84,639.94	4.12	2,055,156	—	—	—
Kansas	39,183.07	4.93	794,975	38,565.54	4.93	782,351
West North Central	**71,755.42**	**4.40**	**1,630,815**	**78,281.27**	**4.36**	**1,797,263**
Delaware	219,518.35	4.47	4,907,024	315,339.47	4.28	7,363,308
Maryland	91,866.32	5.10	1,803,054	92,947.67	5.09	1,824,573
District of Columbia	937,296.18	5.16	18,147,683	937,296.18	5.16	18,147,683
Virginia	138,831.69	4.22	3,288,276	164,697.55	4.14	3,977,336
West Virginia	35,407.30	3.56	994,062	35,435.20	3.56	995,041
North Carolina	107,864.54	4.98	2,165,602	118,438.84	4.87	2,429,843
South Carolina	239,581.88	4.24	5,656,877	221,893.88	4.40	5,046,488
Georgia	67,302.90	4.83	1,392,652	88,973.94	4.80	1,855,248
Florida	37,109.60	5.30	700,356	29,336.88	4.79	612,327
South Atlantic	**79,504.45**	**4.70**	**1,692,971**	**82,419.64**	**4.63**	**1,781,667**
Kentucky	141,455.61	5.26	2,688,518	80,841.46	3.70	2,186,081
Tennessee	81,726.54	4.68	1,746,591	148,635.97	3.37	4,415,087
Alabama	121,959.18	4.39	2,780,241	147,744.58	4.39	3,365,600
Mississippi	93,059.04	4.70	1,978,850	77,445.71	4.83	1,603,408
East South Central	**102,299.09**	**4.73**	**2,162,309**	**106,634.87**	**4.24**	**2,512,138**
Arkansas	23,023.10	5.09	452,042	18,798.82	5.47	343,943
Louisiana	71,129.34	4.23	1,680,667	80,679.06	4.11	1,964,587
Oklahoma	26,382.84	3.70	712,797	24,723.29	3.50	706,634
Texas	57,700.29	4.04	1,426,672	57,388.12	3.94	1,456,100
West South Central	**48,555.76**	**4.13**	**1,174,784**	**47,854.35**	**4.03**	**1,186,074**
Montana	47,767.07	2.83	1,690,267	29,422.06	3.28	895,730
Idaho	52,964.31	2.60	2,034,640	53,188.52	2.56	2,074,548
Wyoming	82,125.26	3.50	2,348,519	77,295.07	3.25	2,380,897
Colorado	187,222.94	4.37	4,283,227	774,627.42	4.39	17,645,628
New Mexico	49,483.80	5.21	949,517	38,163.84	4.94	772,958
Arizona	96,386.80	5.68	1,695,867	69,712.98	6.22	1,120,132
Utah	31,569.96	3.90	809,765	26,506.12	3.72	712,119
Nevada	407,171.42	4.65	8,758,225	388,069.64	5.20	7,468,165
Mountain	**72,225.56**	**4.11**	**1,756,435**	**58,849.17**	**4.11**	**1,432,017**
Washington	89,731.17	2.50	3,594,559	23,859.23	3.51	680,209
Oregon	68,921.30	3.15	2,191,161	47,622.76	3.70	1,288,365
California	110,495.18	7.26	1,522,237	503,903.01	7.31	6,894,640
Pacific	**101,325.59**	**5.06**	**2,004,323**	**178,944.00**	**6.43**	**2,781,941**
Alaska	49,927.68	6.95	718,065	18,427.89	7.66	240,728
Hawaii	400,183.61	7.57	5,285,431	400,183.61	7.57	5,285,431
Alaska & Hawaii	**236,960.11**	**7.51**	**3,156,983**	**256,436.08**	**7.57**	**3,385,883**

p Preliminary.

TABLE 69B
REVENUE AND USE PER INDUSTRIAL CUSTOMER
BY STATE — 1989r

State/Division	Total Electric Utility Industry			Investor-Owned Electric Utilities		
	Avg. Annual Revenue per Customer	Avg. Revenue per kWh Sold	Avg. Annual kWh Use per Customer	Avg. Annual Revenue per Customer	Avg. Revenue per kWh Sold	Avg. Annual kWh Use per Customer
Total United States	**$ 85,945.62**	**4.79¢**	**1,793,286**	**$ 90,211.75**	**4.83¢**	**1,868,875**
Maine	90,138.60	5.38	1,676,256	92,255.68	5.34	1,727,385
New Hampshire	136,937.83	7.10	1,927,734	138,239.69	7.13	1,939,550
Vermont	72,471.70	6.55	1,106,709	463,726.92	5.95	7,800,242
Massachusetts	62,456.31	7.27	859,351	69,809.29	6.86	1,017,020
Rhode Island	39,137.07	7.52	520,119	39,135.85	7.50	521,616
Connecticut	94,992.80	7.23	1,313,838	87,426.44	7.33	1,192,864
New England	**74,371.06**	**6.89**	**1,078,627**	**80,818.94**	**6.71**	**1,204,152**
New York	150,219.40	5.29	2,840,767	175,429.24	6.05	2,901,320
New Jersey	91,630.43	7.14	1,283,119	91,502.21	7.16	1,278,741
Pennsylvania	88,769.56	5.73	1,548,427	89,370.50	5.72	1,561,138
Middle Atlantic	**102,262.01**	**5.82**	**1,756,069**	**104,858.62**	**6.08**	**1,725,776**
Ohio	87,985.11	3.89	2,261,470	90,141.11	3.84	2,344,588
Indiana	89,050.13	4.46	1,997,052	103,037.84	4.40	2,340,038
Illinois	315,912.59	5.36	5,892,969	345,233.21	5.35	6,506,294
Michigan	144,119.76	5.53	2,607,914	148,910.57	5.54	2,687,861
Wisconsin	150,247.39	4.14	3,629,123	231,862.62	4.01	5,789,104
East North Central	**125,316.47**	**4.61**	**2,718,274**	**136,443.57**	**4.58**	**2,978,793**
Minnesota	110,691.80	4.15	2,665,847	127,775.64	4.05	3,155,286
Iowa	107,566.66	4.05	2,657,757	153,508.21	3.94	3,897,055
Missouri	56,244.11	5.08	1,107,561	59,842.46	5.19	1,153,126
North Dakota	47,342.49	5.00	946,880	37,697.77	4.96	759,343
South Dakota	55,559.75	4.44	1,250,277	94,433.55	4.62	2,045,345
Nebraska	81,668.47	4.12	1,981,349	—	—	—
Kansas	37,087.28	4.82	769,699	35,962.73	4.78	751,945
West North Central	**70,424.11**	**4.42**	**1,594,329**	**77,381.45**	**4.37**	**1,768,831**
Delaware	202,090.05	4.44	4,554,375	279,688.89	4.23	6,610,005
Maryland	83,719.32	4.72	1,773,929	84,527.86	4.71	1,794,013
District of Columbia	904,883.72	5.13	17,648,711	904,883.72	5.13	17,648,711
Virginia	140,091.20	4.20	3,332,876	166,803.24	4.12	4,050,817
West Virginia	34,950.02	3.59	974,106	34,976.96	3.59	975,041
North Carolina	105,481.73	4.87	2,167,996	115,820.76	4.75	2,439,887
South Carolina	243,017.08	4.26	5,699,153	225,966.40	4.43	5,095,275
Georgia	64,056.36	4.69	1,365,295	83,546.18	4.63	1,805,609
Florida	35,495.79	5.22	679,512	28,227.89	4.73	597,036
South Atlantic	**76,607.85**	**4.60**	**1,667,069**	**78,985.51**	**4.51**	**1,750,502**
Kentucky	160,565.63	5.91	2,717,312	77,986.69	3.65	2,139,057
Tennessee	81,391.85	4.70	1,730,057	158,279.88	3.36	4,714,047
Alabama	123,707.65	4.36	2,837,497	148,273.40	4.39	3,376,929
Mississippi	84,040.55	4.91	1,712,255	68,688.77	4.96	1,386,162
East South Central	**104,518.09**	**4.90**	**2,131,686**	**102,428.63**	**4.25**	**2,409,789**
Arkansas	22,772.30	4.86	468,451	18,326.59	5.15	355,570
Louisiana	69,931.58	4.30	1,625,411	79,267.97	4.18	1,898,276
Oklahoma	25,860.76	3.70	698,136	24,102.89	3.49	689,781
Texas	56,413.55	4.06	1,390,137	56,034.75	3.95	1,417,625
West South Central	**47,824.87**	**4.14**	**1,155,281**	**47,073.76**	**4.04**	**1,165,691**
Montana	54,062.13	3.09	1,749,008	30,940.15	3.30	936,281
Idaho	57,778.69	2.61	2,210,285	58,522.05	2.58	2,272,142
Wyoming	89,317.48	3.60	2,481,598	85,293.98	3.35	2,544,508
Colorado	191,814.81	4.46	4,304,909	824,682.04	4.45	18,521,160
New Mexico	50,264.67	5.32	945,159	38,708.92	5.07	764,086
Arizona	114,559.00	5.39	2,126,907	88,995.40	5.91	1,505,278
Utah	36,849.12	4.11	897,302	31,186.74	3.96	787,880
Nevada	373,814.68	4.43	8,443,246	353,310.74	4.98	7,101,519
Mountain	**78,214.91**	**4.12**	**1,897,624**	**64,197.15**	**4.11**	**1,563,146**
Washington	138,659.68	2.74	5,061,997	37,983.99	3.32	1,145,215
Oregon	171,705.63	3.32	5,171,957	136,976.29	3.80	3,607,056
California	107,958.54	7.11	1,518,219	538,640.98	7.22	7,457,496
Pacific	**116,387.88**	**5.11**	**2,279,874**	**269,888.35**	**6.39**	**4,536,646**
Alaska	50,031.57	6.97	718,263	18,680.21	7.70	242,501
Hawaii	352,008.81	6.62	5,318,816	352,008.81	6.62	5,318,816
Alaska & Hawaii	**207,330.86**	**6.66**	**3,114,681**	**222,246.59**	**6.65**	**3,342,646**

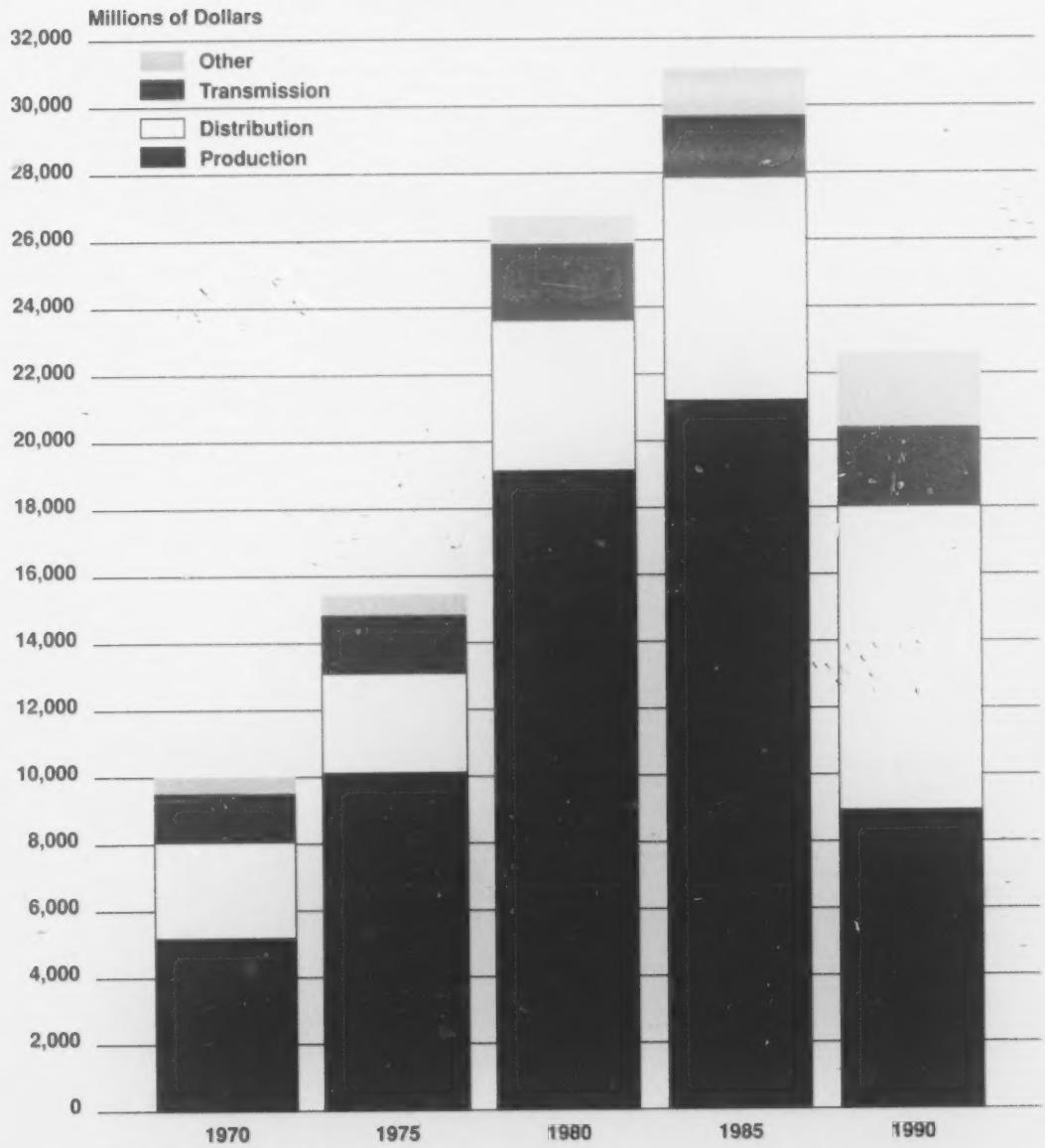
r Revised.

SECTION IX
FINANCIAL

CHART IX-A

CONSTRUCTION EXPENDITURES

INVESTOR-OWNED ELECTRIC UTILITIES



Based on Table 70, page 84.

TABLE 70

CONSTRUCTION EXPENDITURES INVESTOR-OWNED ELECTRIC UTILITIES

BY TYPE OF PLANT
MILLIONS OF DOLLARS

	1990p	1989	1988	1987	1986	1985	1984	1983	1982	1981	1980
Production											
Steam	$ 3,945	$ 4,044	$ 3,946	$ 4,478	$ 4,333	$ 4,725	$ 5,569	$ 5,860	$ 7,828	$ 7,221	$ 7,498
Nuclear	3,870	4,768	5,272	9,239	13,426	15,553	17,478	18,208	16,461	12,785	11,045
Other	1,066	1,091	740	678	724	1,095	893	868	1,050	906	695
Total	**8,881**	**9,903**	**9,959**	**14,395**	**18,483**	**21,372**	**23,939**	**24,935**	**25,339**	**20,912**	**19,238**
Transmission	2,472	2,512	1,942	2,066	1,761	1,863	2,250	2,371	2,203	2,270	2,353
Distribution	9,118	8,685	8,224	7,457	7,248	6,590	5,899	5,021	4,827	4,606	4,483
General/Miscellaneous*	2,167	1,997	1,725	1,585	1,808	1,266	1,355	1,489	1,233	1,336	937
Subtotal	**22,639**	**23,097**	**21,851**	**25,503**	**29,299**	**31,091**	**33,443**	**33,816**	**33,602**	**29,124**	**27,011**
Nuclear Fuel	1,650	1,663	1,780	1,532	1,724	2,202	1,842	1,749	1,748	1,566	1,324
GRAND TOTAL	**$24,289**	**$24,760**	**$23,630**	**$27,035**	**$31,023**	**$33,294**	**$35,285**	**$35,565**	**$35,350**	**$30,690**	**$28,335**
AFUDC included in TOTAL	$ 1,739	$ 2,241	$ 2,711	$ 4,579	$ 5,659	$ 6,941	$ 7,923	$ 7,816	$ 6,612	$ 5,358	$ 4,365

	1979	1978	1977	1976	1975	1974	1973	1972	1971	1970
Production										
Steam	$ 7,572	$ 6,664	$ 6,529	$ 5,689	$ 5,062	$ 5,323	$ 4,923	$ 4,306	$ 3,507	$ 2,790
Nuclear	9,855	8,813	7,273	5,815	4,545	3,969	3,270	2,920	2,410	1,641
Other	854	655	614	460	487	802	662	691	620	818
Total	**18,281**	**16,132**	**14,416**	**11,964**	**10,094**	**10,094**	**8,855**	**7,917**	**6,537**	**5,249**
Transmission	2,090	1,738	1,687	1,832	1,771	2,145	1,878	1,749	1,818	1,625
Distribution	4,334	3,875	3,390	2,974	3,075	3,538	3,568	3,192	2,869	2,751
General/Miscellaneous*	776	1,192	788	590	710	880	758	605	633	422
Subtotal	**25,481**	**22,937**	**20,281**	**17,360**	**15,650**	**16,702**	**15,059**	**13,463**	**11,857**	**10,047**
Nuclear Fuel	1,338	1,093	1,016	798	541	490	232	265	361	217
GRAND TOTAL	**$26,819**	**$24,030**	**$21,297**	**$18,158**	**$16,191**	**$17,192**	**$15,291**	**$13,728**	**$12,218**	**$10,264**
AFUDC included in TOTAL	$ 3,593	$ 2,717	$ 2,267	$ 1,854	$ 1,676	$ 1,576	$ 1,277	$ 1,078	$ 809	$ 583

Note: Total may not equal sum of components due to independent rounding.
This table has been restructured based on data submitted to the Institute. Data, compiled on a 50 state basis, now includes nuclear fuel and reflects the amount of AFUDC in the final.
Construction expenditures are, in general, the gross amounts spent for construction of all kinds, including the acquisition of real estate and all necessary equipment.
The figures include money spent for replacements, additions, and betterments (but not for maintenance of existing plant) as well as for new construction.
**Includes intangible plant.*
p Preliminary.

TABLE 71

COMBINED BALANCE SHEETS — DECEMBER 31ST INVESTOR-OWNED ELECTRIC UTILITIES

INTERCOMPANY TRANSACTIONS ELIMINATED
MILLIONS OF DOLLARS

	1990p	1989	1988	1987	1986	1985
ASSETS						
Utility Plant:						
Electric	$459,801	$433,958	$415,505	$387,154	$348,400	$317,392
Other	28,179	23,666	22,266	21,886	21,698	18,954
Total Utility Plant	**487,980**	**457,624**	**437,771**	**409,039**	**370,097**	**336,345**
Accumulated Provision for Depreciation and Amortization	147,136	135,544	123,517	112,029	102,243	92,567
Net Utility Plant	**340,844**	**322,079**	**314,254**	**297,011**	**267,854**	**243,778**
Construction Work in Progress	23,700	35,206	39,928	51,510	74,978	84,092
Nuclear Fuel	20,162	19,873	19,518	18,440	15,009	13,979
Accumulated Provision for Amortization of Nuclear Fuel Assemblies	12,516	11,514	10,307	8,697	6,466	5,461
Net Nuclear Fuel	**7,646**	**8,359**	**9,211**	**9,744**	**8,543**	**8,518**
Net Total Utility Plant	**372,190**	**365,644**	**363,394**	**358,264**	**351,375**	**336,389**
Other Property and Investment*	20,636	18,768	16,015	15,174	11,887	9,557
Total Current and Accrued Assets	42,766	43,840	41,275	41,515	38,824	40,427
Total Deferred Debits	36,312	33,404	27,780	24,916	21,635	16,194
Total Assets	**$471,905**	**$461,657**	**$448,464**	**$439,869**	**$423,722**	**$402,567**
CAPITALIZATION AND LIABILITIES						
Capitalization:						
Common Capital Stock	$ 56,884	$ 57,329	$ 58,351	$ 53,367	$ 51,658	$ 51,556
Other Paid-In Capital Excluding Retained Earnings**	37,135	35,667	35,891	37,006	37,366	34,036
Retained Earnings	54,096	52,422	48,324	50,904	49,362	43,902
Total Common Capital Stock Equity	**148,115**	**145,419**	**142,567**	**141,277**	**138,386**	**129,495**
Preferred Stock	24,189	25,512	25,394	26,661	27,947	30,614
Long-Term Debt:						
Mortgage Bonds	121,668	119,361	118,711	115,358	115,370	111,763
Other Long-Term Debt	44,018	45,344	42,465	40,824	38,058	37,180
Total Long-Term Debt	**165,686**	**164,705**	**161,176**	**156,181**	**153,428**	**148,944**
Total Capitalization	**337,991**	**335,636**	**329,137**	**324,120**	**319,761**	**309,052**
Total Other Non-Current Liabilities	5,225	5,425	6,466	6,648	5,102	3,278
Total Current and Accrued Liabilities	52,064	46,081	44,469	44,715	40,419	38,718
Contribution in Aid of Construction	102	110	157	174	160	156
Deferred Income Taxes	47,908	45,588	43,178	39,535	35,465	29,853
Deferred Investment Tax Credits	15,331	15,952	16,552	16,983	16,760	15,931
Other Deferred Credits	13,284	12,866	8,506	7,695	6,055	5,578
Total Capitalization and Liabilities	**$471,905**	**$461,657**	**$448,464**	**$439,869**	**$423,722**	**$402,567**

Note: Total may not equal sum of components due to independent rounding. Data for prior years do not reflect restatements. Data based on reports as submitted by electric utilities, some of which report on a consolidated basis.
Data comprising "Net Total Utility Plant" has been reformatted to reflect changes made to Schedule VI of the Uniform Statistical Report. Previous years' data have been revised for comparability.
** Beginning 1990 "Other Property and Investment" includes $2,140 million of decommissioning funds.*
*** Includes Premium on Common and Preferred Stock.*
p Preliminary.

TABLE 72

COMBINED INCOME STATEMENTS — DECEMBER 31ST INVESTOR-OWNED ELECTRIC UTILITIES

INTERCOMPANY TRANSACTIONS ELIMINATED
MILLIONS OF DOLLARS

	1990p	1989	1988	1987	1986	1985
	ELECTRIC DEPARTMENT ONLY					
Operating Revenues	**$146,211**	**$140,883**	**$134,556**	**$129,437**	**$127,552**	**$125,547**
Operating Expenses:						
Operation	69,884	66,200	63,269	59,693	57,975	61,109
Maintenance	11,693	11,267	10,913	10,304	9,688	9,191
Depreciation and Depletion	14,535	14,151	13,325	12,064	10,623	9,736
Amortization Charged to Operation	362	1,166	368	254	130	196
Property Losses Charged to Operation	475	312	399	396	412	370
Deferred Expenses	(323)	(727)	(930)	(1,110)	N/A	N/A
Taxes Other Than Income Taxes	11,406	10,823	10,362	9,766	9,390	8,902
Federal Income Taxes	6,198	6,070	4,952	5,884	5,877	4,637
State Income Taxes	1,026	970	873	827	807	712
Deferred Income Taxes:						
Federal	1,740	2,193	3,409	4,314	4,899	4,069
State	102	(777)	(975)	(551)	352	464
Investment Tax Credit Adjustment	(201)	(291)	(200)	588	1,209	1,964
Total Operating Expenses	**116,898**	**111,360**	**105,765**	**102,429**	**101,360**	**101,350**
Operating Income	$ 29,313	$ 29,523	$ 28,790	$ 27,008	$ 26,191	$ 24,197
	ALL DEPARTMENTS					
Operating Revenues	**$162,622**	**$157,757**	**$150,733**	**$144,569**	**$144,939**	**$144,642**
Operating Expenses:						
Operation	81,824	78,685	75,264	71,018	71,075	75,931
Maintenance	12,243	11,792	11,429	10,795	10,189	9,666
Depreciation and Depletion	15,475	15,038	14,143	12,848	11,416	10,447
Amortization Charged to Operation	551	1,342	531	350	274	295
Property Losses Charged to Operation	493	333	413	423	452	382
Deferred Expenses	(323)	(729)	(936)	(1,117)	N/A	N/A
Taxes Other Than Income Taxes	12,369	11,814	11,300	10,701	10,372	9,880
Federal Income Taxes	6,439	6,249	5,219	6,144	6,122	5,000
State Income Taxes	1,099	1,032	927	871	843	796
Deferred Income Taxes:						
Federal	1,812	2,418	3,597	4,455	5,062	4,209
State	104	(833)	(1,071)	(569)	446	483
Investment Tax Credit Adjustment	(203)	(303)	(211)	575	1,244	2,027
Total Operating Expenses	**131,880**	**126,835**	**120,603**	**116,492**	**117,494**	**119,115**
Operating Income	30,741	30,921	30,130	28,077	27,444	25,530
Other Income (Non-Operating) Net	406	506	(40)	1,510	2,459	2,313
Allowance for Other Funds Used During Construction	1,083	1,256	1,556	3,190	4,189	5,098
Income Before Interest Charges (Gross Income)	**32,231**	**32,683**	**31,646**	**32,777**	**34,093**	**32,942**
Interest Charges:						
Interest on Long-Term Debt	14,870	14,791	14,418	14,317	14,711	14,470
Interest on Short-Term Debt	612	576	572	492	372	504
Amortization of Debt Discount Expense and Premium	277	292	275	229	193	131
Other Interest Expense	736	457	418	392	553	465
Allowance for Borrowed Funds Used During Construction — Credit	(868)	(1,114)	(1,235)	(1,824)	(2,286)	(2,777)
Net Interest Charges	15,628	15,002	14,448	13,605	13,544	12,794
Income Before Extraordinary Items	**16,603**	**17,682**	**17,198**	**19,172**	**20,549**	**20,148**
Extraordinary Items*	182	(137)	(1,431)	(1,127)	(308)	(1659)
Net Income	**16,784**	**17,544**	**15,766**	**18,045**	**20,241**	**18,489**
Preferred Dividend Charges	1,944	2,363	2,008	2,306	2,747	2,877
Available for Common Stock	**14,840**	**15,182**	**13,758**	**15,739**	**17,494**	**15,613**
Common Dividends	13,323	13,198	12,967	12,668	12,303	11,782
Net Income After Dividends	**$ 1,518**	**$ 1,984**	**$ 791**	**$ 3,071**	**$ 5,190**	**$ 3,830**

Note: Total may not equal sum of components due to independent rounding. See page 85 for footnote.
Deferred Income Taxes now shown as "Total Federal" (previously shown as "Property Related") and "Total State" (previously shown as "Non-Property Related").
** Beginning 1987, "Extraordinary Items" includes Cumulative Effects of a change in accounting principle.*
p Preliminary ( ) Denotes credit or negative value. N/A Not Applicable.

TABLE 73

DETAIL OF ELECTRIC OPERATION & MAINTENANCE EXPENSES INVESTOR-OWNED ELECTRIC UTILITIES

MILLIONS OF DOLLARS

	1990p	1989	1988	1987	1986	1985
Production	$59,191	$56,503	$53,884	$50,583	$49,254	$53,068
Transmission and Distribution	7,206	7,048	6,829	6,602	6,251	6,005
Customer Accounts	3,221	2,997	2,871	2,836	2,723	2,537
Customer Service and Information	1,144	960	892	855	826	760
Sales	209	202	175	140	93	65
Administrative and General	10,607	9,757	9,530	8,982	8,514	7,865
Total Operation & Maintenance Expenses	**$81,577**	**$77,467**	**$74,181**	**$69,998**	**$67,663**	**$70,300**
Cost of Fuel*	$32,184	$32,473	$31,421	$31,042	$31,195	$36,635

Note: Total may not equal sum of components due to independent rounding.
** Included in "Total Operation & Maintenance Expenses."*
p Preliminary.

TABLE 74

DETAIL OF TAXES — ELECTRIC DEPARTMENT ONLY INVESTOR-OWNED ELECTRIC UTILITIES

MILLIONS OF DOLLARS

	1990p		1989		1988	
	Amount	% of Oper. Revenue	Amount	% of Oper. Revenue	Amount	% of Oper. Revenue
Federal Taxes						
Income	$ 6,198	4.2%	$ 6,070	4.3%	$ 4,952	3.7%
Deferred Taxes on Income*	1,740	1.2	1,951	1.4	3,181	2.4
Other Deferred Income Taxes**	(201)	N/A	(1,007)	N/A	(1,046)	N/A
Miscellaneous Taxes	1,315	0.9	1,097	0.8	1,057	0.8
Total Federal Taxes Charged to Income	9,052	6.3	8,112	6.5	8,144	6.9
State and Local Taxes	11,219	7.7	10,877	7.7	10,278	7.6
Total Taxes Charged to Income	**$20,271**	**14.0%**	**$18,989**	**14.2%**	**$18,422**	**14.5%**

	1987		1986		1985	
	Amount	% of Oper. Revenue	Amount	% of Oper. Revenue	Amount	% of Oper. Revenue
Federal Taxes						
Income	$ 5,884	4.5%	$ 5,877	4.6%	$ 4,637	3.7
Deferred Taxes on Income*	4,116	3.2	4,610	3.6	3,810	3.0
Other Deferred Income Taxes**	(8)	N/A	1,458	1.2	2,428	1.9
Miscellaneous Taxes	918	0.7	895	0.7	818	0.7
Total Federal Taxes Charged to Income	10,911	8.4	12,841	10.1	11,693	9.3
State and Local Taxes	9,919	7.7	9,694	7.6	9,055	7.2
Total Taxes Charged to Income	**$20,829**	**16.1%**	**$22,534**	**17.7%**	**$20,748**	**16.5%**

Note: Total may not equal sum of components due to independent rounding.
**Due to liberalized depreciation and accelerated amortization.*
***Includes investment tax credits reported as charges to income for the current year.*
p Preliminary. ( ) Denotes negative value. N/A Not Applicable.

TABLE 75

CAPITALIZATION AND CAPITALIZATION RATIOS INVESTOR-OWNED ELECTRIC UTILITIES

MILLIONS OF DOLLARS

	1990p	1989	1988	1987	1986	1985
CAPITALIZATION OUTSTANDING						
Mortgage Bonds	$121,658	$119,361	$118,711	$115,358	$115,370	$111,763
Other Long-Term Debt	44,018	45,344	42,465	40,824	38,058	37,180
Total Long-Term Debt	**165,686**	**164,705**	**161,176**	**156,181**	**153,428**	**148,944**
Preferred Stock	24,189	25,512	25,394	26,661	27,947	30,614
Common Capital Stock	56,884	57,329	58,351	53,367	51,658	51,556
Other Paid-In Capital Excluding Retained Earnings*	37,135	35,667	35,891	37,006	37,366	34,036
Retained Earnings	54,096	52,422	48,324	50,904	49,362	43,902
Total Capitalization	**$337,991**	**$335,636**	**$329,137**	**$324,120**	**$319,761**	**$309,052**
CAPITALIZATION RATIOS						
Mortgage Bonds	36.0%	35.6%	36.1%	35.6%	36.1%	36.2%
Other Long-Term Debt	13.0	13.5	12.9	12.6	11.9	12.0
Total Long-Term Debt	**49.0**	**49.1**	**49.0**	**48.2**	**48.0**	**48.2**
Preferred Stock	7.2	7.6	7.7	8.2	8.7	9.9
Common Capital Stock Equity	43.8	43.3	43.3	43.6	43.3	41.9
Total Capitalization	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Note: Total may not equal sum of components due to independent rounding.
**Includes Premium on Common and Preferred Stock.*
p Preliminary.

TABLE 76

STATEMENT OF CASH FLOWS
INVESTOR-OWNED ELECTRIC UTILITIES

MILLIONS OF DOLLARS

	1990p	1989
Operating Activities:		
Net Income	**$ 16,477**	**$ 17,585**
Noncash Items Included in Net Income:		
Depreciation, Depletion and Amortization	18,755	17,985
Deferred Income Taxes (Net)	1,933	1,137
Allowance for Funds Used During Construction (Equity)	(1,134)	(1,335)
Other	823	(102)
Changes in Working Capital:		
Materials and Supplies, Fuel Inventories, Gas in Storage	(2,079)	(409)
Accounts Receivable (Net)	683	(1,257)
Other Current Assets	64	(654)
Accrued Taxes	(392)	963
Accounts Payable and Other Current Liabilities	275	3,312
Net Cash Provided By (Used For) Operating Activities	**$ 35,404**	**$ 37,225**
Investing Activities:		
Construction Expenditures (excl. AFUDC-Equity)	$ (25,034)	$ (25,348)
Purchase of Other Investments	(1,761)	(1,708)
Sale of Other Investments	705	911
Other	(2,713)	969
Net Cash Provided By (Used For) Investing Activities	**$ (28,803)**	**$ (25,176)**
Financing Activities:		
Issuance of Common Stock (Net Proceeds)	$ 1,780	$ 1,936
Issuance of Preferred/Preference Stock (Net Proceeds)	952	637
Redemption of Preferred/Preference Stock (Net Payments)	(1,238)	(1,404)
Redemption of Long-Term Debt (Net Proceeds)	(10,230)	(15,087)
Common Stock Dividends	(13,418)	(13,202)
Preferred/Preference Stock Dividends	(1,358)	(1,988)
Issuance of Long-Term Debt (Net Proceeds)	15,083	17,350
Increase (Decrease) in Short-Term Debt (Net)	2,505	165
Other Financing	(2,675)	(737)
Net Cash Provided By (Used For) Financing Activities	**$ (8,601)**	**$ (12,328)**
Net Increase (Decrease) in Cash and Cash Equivalents	**$ (2,000)**	**$ (279)**

Note: Total may not equal sum of components due to independent rounding.
p Preliminary.
( ) Denotes negative value.

TABLE 77

PUBLIC UTILITY LONG-TERM FINANCING
INVESTOR-OWNED ELECTRIC UTILITIES

BY YEAR, TYPE OF ISSUE, PURPOSE AND TYPE OF UTILITY
1985 – 1990 — THOUSANDS OF DOLLARS

	1990	1989	1988	1987	1986	1985
ELECTRIC UTILITIES						
LONG-TERM DEBT						
New Capital	$ 5,593,514	$ 8,337,462	$ 6,800,157	$ 8,687,727	$ 10,344,120	$ 9,188,802
Refunding	1,724,245	2,656,750	3,100,730	5,238,655	11,047,010	3,328,435
Divestment	—	—	—	—	—	—
Total Long-Term Debt	**7,317,759**	**10,994,212**	**9,900,882**	**13,926,382**	**21,391,130**	**12,517,237**
PREFERRED STOCK						
New Capital	660,000	350,000	552,000	1,205,000	985,000	655,000
Refunding	55,850	370,000	195,500	753,000	695,600	—
Divestment	—	—	—	—	—	—
Total Preferred	**715,850**	**720,000**	**747,500**	**1,958,000**	**1,680,600**	**655,000**
COMMON STOCK						
New Capital	216,775	771,981	502,713	245,750	605,945	1,578,763
Refunding	—	—	—	—	33,750	71,250
Divestment	—	—	—	—	—	—
Total Common	**216,775**	**771,981**	**502,713**	**245,750**	**639,695**	**1,650,013**
TOTAL CAPITAL						
New Capital	6,470,289	9,459,443	7,854,870	10,138,477	11,935,065	11,422,565
Refunding	1,780,095	3,026,750	3,296,230	5,991,655	11,776,360	3,399,685
Divestment	—	—	—	—	—	—
Total Capital	**$ 8,250,384**	**$12,486,193**	**$11,151,095**	**$16,130,132**	**$23,711,425**	**$14,822,250**
GAS UTILITIES*						
LONG-TERM DEBT						
New Capital	$ 1,073,000	$ 1,286,365	$ 2,565,995	$ 2,875,301	$ 2,768,600	$ 1,382,240
Refunding	—	311,135	334,200	392,659	1,111,900	203,510
Divestment	—	—	—	—	—	—
Total Long-Term Debt	**1,073,000**	**1,597,500**	**2,900,195**	**3,267,960**	**3,880,500**	**1,585,750**
PREFERRED STOCK						
New Capital	75,000	65,000	15,000	251,125	—	—
Refunding	—	—	—	155,000	—	100,000
Divestment	—	—	—	—	—	—
Total Preferred	**75,000**	**65,000**	**15,000**	**406,125**	**—**	**100,000**
COMMON STOCK						
New Capital	238,744	334,486	212,936	93,744	224,269	44,375
Refunding	—	—	—	14,000	—	—
Divestment	—	—	—	—	—	—
Total Common	**238,744**	**334,486**	**212,936**	**107,744**	**224,269**	**44,375**
TOTAL CAPITAL						
New Capital	1,386,744	1,685,851	2,793,931	3,220,170	2,992,869	1,426,615
Refunding	—	311,135	334,200	561,659	1,111,900	303,510
Divestment	—	—	—	—	—	—
Total Capital	**$ 1,386,744**	**$ 1,996,986**	**$ 3,128,131**	**$ 3,781,829**	**$ 4,104,769**	**$ 1,730,125**
ALL OTHER UTILITIES†						
LONG-TERM DEBT						
New Capital	$ 825,000	$ 687,428	$ 246,200	$ 1,057,246	$ 1,375,618	$ 851,750
Refunding	400,000	987,072	—	365,000	7,950,382	2,560,000
Divestment	—	—	—	—	—	—
Total Long-Term Debt	**1,225,000**	**1,674,500**	**246,200**	**1,422,246**	**9,326,000**	**3,411,750**
PREFERRED STOCK						
New Capital	50,000	—	60,000	—	—	—
Refunding	—	—	—	—	—	—
Divestment	—	—	—	—	—	—
Total Preferred	**50,000**	**—**	**60,000**	**—**	**—**	**—**
COMMON STOCK						
New Capital	—	80,500	15,600	4,840	101,086	475,100
Refunding	—	—	—	—	—	—
Divestment	—	—	—	—	—	—
Total Common	**—**	**80,500**	**15,600**	**4,840**	**101,086**	**475,100**
TOTAL CAPITAL						
New Capital	875,000	767,928	321,800	1,062,086	1,476,704	1,326,850
Refunding	400,000	987,072	—	365,000	7,950,382	2,560,000
Divestment	—	—	—	—	—	—
Total Capital	**$ 1,275,000**	**$ 1,955,000**	**$ 321,800**	**$ 1,427,086**	**$ 9,427,086**	**$ 3,886,850**
TOTAL UTILITY FINANCING						
LONG-TERM DEBT						
New Capital	$ 7,491,514	$10,511,255	$ 9,612,347	$12,620,274	$14,488,338	$11,422,792
Refunding	2,124,245	3,954,957	3,434,930	5,996,314	20,109,292	6,091,945
Divestment	—	—	—	—	—	—
Total Long-Term Debt	**9,615,759**	**14,466,212**	**13,047,277**	**18,616,588**	**34,597,630**	**17,514,737**
PREFERRED STOCK						
New Capital	785,000	415,000	627,000	1,456,125	985,000	655,000
Refunding	55,850	370,000	195,500	908,000	695,600	100,000
Divestment	—	—	—	—	—	—
Total Preferred	**840,850**	**785,000**	**822,500**	**2,364,125**	**1,680,600**	**755,000**
COMMON STOCK						
New Capital	455,519	1,186,967	731,249	344,334	931,300	2,098,238
Refunding	—	—	—	14,000	33,750	71,250
Divestment	—	—	—	—	—	—
Total Common	**455,519**	**1,186,967**	**731,249**	**358,334**	**965,050**	**2,169,488**
TOTAL CAPITAL						
New Capital	8,732,033	12,113,222	10,970,596	14,420,733	16,404,638	14,176,030
Refunding	2,180,095	4,324,957	3,630,430	6,918,314	20,838,642	6,263,195
Divestment	—	—	—	—	—	—
Total Capital	**$10,912,128**	**$16,438,179**	**$14,601,026**	**$21,339,047**	**$37,243,280**	**$20,439,225**

*Classification as to type of utility is based upon predominant source of revenue. *Includes gas pipe line companies.*
†"Other Utilities" are water, transit, telephone and telegraph, and does not include railroads.
Note: Includes negotiated sales of pollution control bonds: 1990, $1,313 million; 1989, $1,499 million; 1988, $1,189 million; 1987, $1,970 million; 1986, $1,570 million; and 1985, $6,071 million.
Source: Ebasco Business Consulting Company

TABLE 78

WEIGHTED AVERAGE OF YIELDS ON NEWLY ISSUED DOMESTIC BONDS AND PREFERRED STOCKS

1970 – 1990

Year	Utility Bonds					Preferred Stocks
	Electric and Gas	Telephone	Water Works	All Utilities	Industrial Bonds	All Utilities
1990	**9.69%**	**9.74%**	**....%**	**9.83%**	**9.91%**	**9.34%**
1989	9.92	8.68	....	9.27r	9.51	9.24
1988	10.03	10.05	10.15	10.19	9.94	7.38
1987	9.74	9.63	....	9.75	9.29	7.83
1986	9.61	8.96	....	9.45	9.38	8.26
1985	11.83	11.54	11.18	11.78	11.64	10.08
1984	14.25	12.73	....	13.33	12.58	13.16
1983	12.70	11.72	....	12.53	11.50	12.06
1982	14.93	14.23	....	14.56	13.65	14.42
1981	16.31	15.45	....	16.30	15.16	15.11
1980	13.46	12.59	....	13.09	11.66	12.28
1979	10.85	10.29	....	10.64	9.49	9.76
1978	9.30	9.07	....	9.22	8.98	9.03
1977	8.43	8.21	....	8.38	8.15	8.43
1976	8.92	8.41	....	8.80	8.61	9.12
1975	9.97	9.27	....	9.76	9.12	10.63
1974	9.59	9.22	....	9.21	8.87	9.95
1973	7.91	7.87	....	7.88	7.86	7.50
1972	7.50	7.36	....	7.46	7.51	7.53
1971	7.72	7.58	....	7.71	7.80	7.74
1970	8.79	8.75	....	8.85	8.86	9.01

r Revised.
Source: Moody's Investors Service.

TABLE 79

MOODY'S AVERAGE YIELDS ON UTILITY BONDS AND STOCKS

BY MOODY'S BOND RATINGS AND STOCK QUALITY GROUPS

1980 - 1990

	BONDS					PREFERRED STOCKS			COMMON STOCKS					
		Rating							High Quality		Good Quality		Medium Quality	
End of Month	Over-all* Average	Aaa**	Aa	A	Baa	aa High Quality	a Good Quality	baa Medium Quality	Yield	E/P Ratio†	Yield	E/P Ratio†	Yield	E/P Ratio†
1990														
December	9.58%	9.18%	9.43%	9.73%	9.99%	9.08%	9.30%	9.54%	6.60%	8.75%	6.84%	6.62%	7.89%	6.62%
September	10.04	9.75	9.88	10.19	10.33	9.30	9.70	9.84	7.03	8.09	6.91	7.71	9.12	7.29
June	9.68	9.38	9.62	9.77	9.96	9.17	9.46	9.71	6.79	9.55	7.16	8.48	7.94	6.59
March	9.79	9.51	9.70	9.84	10.10	9.18	9.47	9.63	6.53	9.47	7.18	9.00	8.46	7.22
1989														
December	9.33	8.93	9.29	9.46	9.62	[illegible]	9.25	9.38	5.83	8.69	6.57	8.79	7.68	8.19
September	9.48	9.15	9.42	9.59	9.77	[illegible]	9.43	9.73	6.47	9.00	7.06	8.05	8.01	9.11
June	9.36	9.01	9.26	9.53	9.64	8.93	9.37	9.73	6.41	9.15	7.25	7.79	8.14	9.77
March	10.21	9.96	10.06	10.27	10.54	9.54	10.11	10.38	7.06	10.21	7.98	8.50	9.13	10.87
1988														
December	10.09	9.74	9.97	10.16	10.47	9.50	10.06	10.37	6.58	10.35	7.45	7.81	8.87	10.48
September	10.06	9.80	9.91	10.14	10.40	9.40	9.89	10.17	6.67	10.32	7.26	9.47	9.02	10.71
June	10.70	10.25	10.50	10.78	11.25	9.28	9.89	10.09	6.58	9.89	8.12	9.57	9.19	11.15
March	10.36	9.93	10.16	10.33	11.02	9.06	9.74	10.04	6.68	10.28	8.29	10.10	9.38	12.19
1987														
December	10.91	10.55	10.65	10.94	11.49	9.35	10.24	10.45	6.68	10.38	8.60	9.60	9.54	12.06
September	11.22	10.75	10.84	11.42	11.87	9.40	10.19	10.47	6.28	10.06	7.97	9.55	8.60	12.06
June	9.86	9.39	9.55	10.02	10.46	8.66	9.13	9.75	6.23	9.58	7.81	10.03	8.57	11.14
March	8.89	8.38	8.77	9.04	9.38	7.82	8.36	8.90	6.00	9.24	6.99	8.94	7.89	10.94
1986														
December	9.00	8.46	8.85	9.14	9.54	7.98	8.64	9.27	5.48	7.53	6.91	9.28	7.96	10.92
September	9.39	8.88	9.26	9.48	9.95	8.09	8.76	9.36	5.49	7.46	6.97	9.55	8.15	11.48
June	9.16	8.67	9.05	9.23	9.70	8.54	9.32	9.89	5.57	7.55	7.23	9.64	8.24	11.21
March	8.93	8.30	8.75	9.06	9.60	8.61	9.05	9.78	6.07	8.32	7.16	9.84	9.01	11.17
1985														
December	10.56	9.99	10.30	10.75	11.19	10.00	10.28	11.09	7.34	11.66	8.40	11.67	9.60	13.57
September	11.95	11.29	11.73	12.07	12.69	10.60	11.05	12.52	8.36	13.30	9.74	13.66	10.88	15.63
June	11.93	11.16	11.60	12.16	12.81	10.25	10.83	11.97	7.46	11.83	8.59	12.22	9.48	13.78
March	13.59	12.90	13.45	13.86	14.13	11.62	12.32	12.98	8.13	13.32	9.15	13.33	10.48	15.12
1984														
December	12.96	12.54	12.79	13.02	13.49	12.25	12.97	13.71	8.26	14.10	9.65	13.73	10.96	15.60
September	13.95	—	13.38	14.13	14.35	12.31	13.31	14.28	8.64	14.86	10.43	14.48	11.90	16.97
June	15.32	—	14.96	15.25	15.76	13.28	14.22	14.85	9.35	17.01	11.51	15.88	13.34	18.84
March	14.16	—	13.78	14.04	14.66	12.40	13.12	13.55	9.65	16.89	11.37	15.64	12.81	18.77
1983														
December	13.46	12.96	13.15	13.50	14.22	12.18	12.61	13.34	8.83	15.32	10.43	13.95	11.97	17.04
September	13.20	12.66	12.87	13.27	13.98	11.70	12.15	12.72	9.03	15.26	10.17	14.00	10.86	14.94
June	13.13	12.32	12.63	13.54	14.04	11.34	12.05	12.47	9.37	15.11	10.75	14.29	10.84	14.29
March	13.26	12.23	12.66	13.82	14.34	11.17	11.79	12.51	9.35	14.77	10.19	14.14	11.13	14.41
1982														
December	13.50	12.30	12.68	14.37	14.65	11.63	12.20	13.26	9.22	15.20	10.56	14.77	11.43	14.79
September	14.39	12.97	13.76	15.31	15.52	12.84	13.49	14.11	9.64	15.91	11.30	15.78	12.15	16.17
June	16.37	15.55	16.04	16.56	17.32	14.30	14.69	15.67	10.08	14.13	11.96	15.95	13.03	17.33
March	16.19	15.15	15.62	16.64	17.35	14.44	14.81	15.48	10.09	16.74	11.53	15.96	12.74	16.72
1981														
December	16.23	14.88	15.90	16.68	17.45	14.97	15.47	15.83	11.01	16.19	11.72	14.43	13.53	17.58
September	17.56	16.74	17.43	17.84	18.21	14.68	15.28	16.01	11.52	16.74	12.01	14.73	13.96	18.07
June	15.49	14.47	15.06	15.84	16.60	13.75	14.15	15.02	10.94	15.78	11.70	14.05	12.88	16.95
March	14.86	13.96	14.61	15.17	15.69	13.35	13.72	14.57	11.71	16.51	12.20	15.21	13.30	17.63
1980														
December	14.11	13.18	13.91	14.14	15.20	13.15	14.01	14.56	11.49	15.65	12.36	16.86	13.27	17.01
September	13.68	12.91	13.49	13.74	14.58	12.02	12.92	13.76	11.37	15.46	11.83	16.01	12.77	15.71
June	12.04	11.30	11.84	12.22	12.81	10.59	10.97	12.05	10.24	13.41	10.65	14.36	11.52	13.22
March	14.57	13.35	14.57	14.96	15.41	13.09	14.74	15.22	12.15	15.50	12.52	18.27	13.93	19.11

Note: Yields shown under preferred stocks and common stocks represent averages of ten companies in each quality group.

** Average yield for selected utility bonds in each of the four top quality ratings shown.*

*** The Aaa public utility average was suspended January 17, 1984, because of a lack of appropriate issues and reinstated on October 12. The 1984 high and low for the Average Utility and the Aaa Utility, were determined when an Aaa Utility was available.*

† Ratio in percent is obtained by dividing earnings per share by market price per share.

Source: Moody's Investors Service.

TABLE 80

MOODY'S 24 UTILITY COMMON STOCKS END-OF-MONTH AVERAGES

Year	Average	January	February	March	April	May	June	July	August	September	October	November	December
						MARKET PRICE — WEIGHTED AVERAGE — $ PER SHARE							
1991	...	**116.65**	**121.00**	**123.29**	**122.25**	**120.48**	**119.19**	**124.25**	...	...	...	...	...
1990	111.97	116.90	116.81	115.40	107.68	111.55	112.50	113.38	104.90	104.47	114.55	116.56	117.77
1989	110.31	103.23	99.81	98.64	102.49	106.80	111.25	117.12	113.70	113.73	116.28	119.35	122.52
1988	97.67	102.86	100.38	95.22	91.65	95.42	96.88	96.51	96.27	98.81	101.32	99.67	100.94
1987	106.26	123.06	118.35	113.48	107.10	103.30	105.83	102.44	105.66	102.59	98.39	96.30	94.24
1986	111.11	97.44	106.11	109.01	102.23	104.88	109.23	117.40	125.66	112.15	117.57	117.99	113.66
						DIVIDEND RATE — WEIGHTED AVERAGE — $ PER SHARE							
1991	...	**8.87**	**8.91**	**8.91**	**8.92**	**8.92**	**8.95**	**8.95**	...	...	...	...	...
1990	8.79	8.99	9.03	9.03	8.09	8.69	8.72	8.72	8.72	8.72	8.72	8.73	8.76
1989	8.82	8.76	8.78	8.78	8.80	8.81	8.84	8.84	8.84	8.84	8.84	8.85	8.85
1988	8.87	9.17	9.17	8.95	8.98	8.99	9.03	8.69	8.69	8.69	8.69	8.69	8.71
1987	9.12	9.09	9.09	9.09	9.12	9.13	9.13	9.13	9.13	9.14	9.14	9.14	9.12
1986	8.89	8.80	8.80	8.80	8.84	8.89	8.89	8.94	8.94	8.94	8.95	8.96	8.97
						YIELD — %							
1991	...	**7.60**	**7.36**	**7.23**	**7.30**	**7.40**	**7.51**	**7.20**	...	...	...	...	...
1990	7.85	7.69	7.73	7.83	8.08	7.79	7.75	7.69	8.31	8.35	7.61	7.49	7.44
1989	8.00	8.49	8.80	8.90	8.59	8.25	7.95	7.55	7.77	7.77	7.60	7.42	7.22
1988	9.08	8.92	9.14	9.40	9.80	9.42	9.32	9.00	9.03	8.79	8.58	8.72	8.63
1987	8.58	7.39	7.68	8.01	8.50	8.88	8.63	8.91	8.64	8.91	9.29	9.49	9.68
1986	8.00	9.03	8.29	8.07	8.65	8.48	8.14	7.61	7.11	7.97	7.61	7.59	7.89

	EARNINGS — WEIGHTED AVERAGE — $ PER SHARE			
	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
1991	...	...	...	...
1990	10.46	9.27	9.74	9.56
1989	7.97	8.22	8.54	11.07
1988	11.27	10.70	10.60	7.55
1987	12.86	12.63	12.36	11.45
1986	12.40	12.72	13.17	13.13

Note: Quarterly earnings are for the 12 months ended March 31, June 30, September 30 and December 31.
Source: Moody's Investors Service.

SECTION X

ECONOMICS AND OTHER

TABLE B2

CONSUMER PRICE INDEX, 1967–1990

1982 – 84 EQUALS 100

Year	All Items		Food and Beverages		Housing	
	Index	Percent Change	Index	Percent Change	Index	Percent Change
1990*	**130.7**	**5.4**	**132.1**	**5.8**	**128.5**	**4.5**
1989*	124.0	4.8	124.9	5.7	123.0	3.8
1988*	118.3	4.1	118.2	4.1	118.5	3.8
1987*	113.6	3.6	113.5	4.0	114.2	3.0
1986*	109.6	1.9	109.1	3.3	110.9	3.0
1985*	107.6	3.6	105.6	2.3	107.7	4.0
1984*	103.9	4.3	103.2	3.7	103.6	4.1
1983*	99.6	3.2	99.5	2.3	99.5	2.7
1982*	96.5	6.2	97.3	4.1	96.9	7.2
1981*	90.9	10.3	93.5	7.8	90.4	11.5
1980*	82.4	13.5	86.7	8.5	81.1	15.7
1979*	72.6	11.3	79.9	10.7	70.1	12.3
1978*	65.2	7.6	72.2	9.7	62.4	8.7
1977	60.6	6.5	65.8	6.0	57.4	6.7
1976	56.9	5.8	62.1	3.2	53.8	6.1
1975	53.8	9.1	60.2	8.5	50.7	10.7
1974	49.3	11.0	55.5	13.7	45.8	11.2
1973	44.4	6.2	48.8	13.2	41.2	4.6
1972	41.8	3.2	43.1	4.1	39.4	3.7
1971	40.5	4.4	41.4	3.2	38.0	4.4
1970	38.8	5.7	40.1	5.2	36.4	7.1
1969	36.7	5.5	38.1	5.2	34.0	6.3
1968	34.8	4.2	36.2	3.4	32.0	3.9
1967	33.4	3.1	35.0	—	30.8	—

Year	Transportation		Gas and Electricity		Electricity	
	Index	Percent Change	Index	Percent Change	Index	Percent Change
1990*	**120.5**	**5.6**	**109.3**	**1.7**	**117.4**	**2.4**
1989*	114.1	5.0	107.5	2.8	114.7	2.9
1988*	108.7	3.1	104.6	0.8	111.5	1.4
1987*	105.4	3.0	103.8	(1.8)	110.0	(0.4)
1986*	102.3	(3.9)	105.7	(1.3)	110.4	1.4
1985*	106.4	2.6	107.1	1.6	108.9	3.4
1984*	103.7	4.4	105.4	3.8	105.3	6.5
1983*	99.3	2.4	101.5	8.9	98.9	3.2
1982*	97.0	4.1	93.2	13.8	95.8	9.9
1981*	93.2	12.2	81.9	14.7	87.2	15.0
1980*	83.1	17.9	71.4	17.0	75.8	15.5
1979*	70.5	14.3	61.0	10.9	65.6	7.7
1978*	61.7	4.6	55.0	8.9	60.9	7.6
1977	59.0	7.1	50.5	13.0	56.6	6.6
1976	55.1	10.0	44.7	11.5	53.1	6.2
1975	50.1	9.4	40.1	16.2	50.0	13.4
1974	45.8	11.2	34.5	15.4	44.1	17.9
1973	41.2	3.3	29.9	4.9	37.4	5.1
1972	39.9	1.0	28.5	5.2	35.6	5.0
1971	39.5	5.3	27.1	6.7	33.9	6.6
1970	37.5	5.0	25.4	4.5	31.8	3.2
1969	35.7	4.1	24.3	1.7	30.8	2.0
1968	34.3	3.0	23.9	0.8	30.2	1.0
1967	33.3	3.1	23.7	0.4	29.9	0.7

**Data beginning 1978 are for All Urban Consumers; earlier data are for Urban Wage Earners and Clerical Workers.*
Source: U.S. Department of Labor, Bureau of Labor Statistics. CPI Detailed Report *and* Monthly Labor Review.

TABLE 83

PRODUCER PRICE INDEX— FINISHED GOODS AND SELECTED INDUSTRIAL COMMODITIES

1982 EQUALS 100

	Finished Goods		Metals and Metal Products		Machinery and Equipment		Furniture and Household Durables		Fuels and Related Products and Power	
Year	Index	Percent Change	Index	Percent Change	Index	Percent Change	Index	Percent Change	Index	Percent Change
1990	**119.2**	**4.9**	**123.0**	**(0.9)**	**120.7**	**2.8**	**119.1**	**1.9**	**82.2**	**12.8**
1989	113.6r	5.2	124.1	4.5	117.4	3.7	116.9	3.4	72.9	9.3
1988	108.0	2.5	118.7	10.8	113.2	2.5	113.1	2.9	66.7	(5.0)
1987	105.4	2.1	107.1	3.8	110.4	1.5	109.9	1.6	70.2	0.6
1986	103.2	(1.4)	103.2	(1.1)	108.8	1.5	108.2	1.0	69.8	(23.6)
1985	104.7	1.0	104.4	(0.4)	107.2	2.0	107.1	1.3	91.4	(3.6)
1984	103.7	2.1	104.8	2.9	105.1	2.3	105.7	2.2	94.8	(1.1)
1983	101.6	1.6	101.8	1.8	102.7	2.7	103.4	3.4	95.9	(4.1)
1982	100.0	4.1	100.0	0.4	100.0	5.9	100.0	4.3	100.0	(0.2)
1981	96.1	9.2	99.6	4.8	94.4	9.8	95.9	5.7	100.2	21.0
1980	88.0	13.4	95.0	10.5	86.0	12.1	90.7	9.5	82.8	40.6
1979	77.6	11.2	86.0	14.2	76.7	9.1	82.8	6.8	58.9	26.7
1978	69.8	7.9	75.3	8.7	70.3	7.8	77.5	5.9	46.5	6.7
1977	64.7	6.4	69.3	6.6	65.2	6.4	73.2	4.1	43.6	13.8
1976	60.8	4.5	65.0	5.7	61.3	5.9	70.3	4.1	38.3	8.2
1975	58.2	10.6	61.5	7.9	57.9	15.8	67.5	9.2	35.4	17.6
1974	52.6	15.4	57.0	29.5	50.0	14.4	61.8	11.0	30.1	55.2
1973	45.6	9.1	44.0	7.6	43.7	3.3	55.7	3.5	19.4	13.5
1972	41.8	3.2	40.9	3.8	42.3	2.2	53.8	1.3	17.1	3.0
1971	40.5	3.1	39.4	1.8	41.4	3.5	53.1	2.3	16.6	8.5
1970	39.3	3.4	38.7	7.5	40.0	4.7	51.9	2.4	15.3	4.8

	Coal		Gas Fuels		Electric Power		Crude Petroleum		Petroleum Products, Refined	
Year	Index	Percent Change	Index	Percent Change	Index	Percent Change	Index	Percent Change	Index	Percent Change
1990	**97.4**	**2.0**	**78.2**	**3.9**	**117.6**	**2.4**	**70.9**	**25.9**	**74.8**	**22.2**
1989	95.5	0.1	75.3r	5.5	114.8r	3.2	56.3	21.9	61.2	13.5
1988	95.4	(1.8)	71.4	(3.6)	111.2	0.5	46.2	(16.8)	53.9	(5.1)
1987	97.1	(3.7)	74.1	(10.9)	110.6	(1.8)	55.5	18.3	56.8	6.8
1986	100.8	(1.4)	83.2	(15.7)	112.6	0.9	46.9	(44.5)	53.2	(36.1)
1985	102.2	0.0	98.7	(5.6)	111.6	3.1	84.5	(7.4)	83.2	(4.8)
1984	102.2	1.7	104.5	(3.3)	108.2	5.3	91.3	(1.7)	87.4	(2.8)
1983	100.5	0.5	108.1	8.1	102.8	2.8	92.9	(7.1)	89.9	(10.1)
1982	100.0	7.5	100.0	12.9	100.0	10.7	100.0	(8.8)	100.0	(5.6)
1981	93.0	6.4	88.6	23.6	90.3	14.2	109.6	44.4	105.9	19.5
1980	87.4	3.7	71.7	39.8	79.1	18.9	75.9	48.0	88.6	51.7
1979	84.3	4.9	51.3	27.0	66.5	8.0	51.3	25.4	58.4	38.4
1978	80.4	10.4	40.4	10.4	61.6	7.5	40.9	9.4	42.2	4.2
1977	72.8	5.7	36.6	35.6	57.3	12.1	37.4	8.1	40.5	11.6
1976	68.9	(4.6)	27.0	32.4	51.1	7.4	34.6	3.3	36.3	7.4
1975	72.2	16.1	20.4	33.3	47.6	18.7	33.5	15.9	33.8	15.4
1974	62.2	52.5	15.3	28.6	40.1	26.1	28.9	68.0	29.3	73.4
1973	40.8	12.7	11.9	10.2	31.8	6.4	17.2	11.0	16.9	18.2
1972	36.2	6.5	10.8	5.9	29.9	4.5	15.5	(0.6)	14.3	1.4
1971	34.0	21.0	10.2	4.1	28.6	9.6	15.6	7.6	14.1	6.0
1970	28.1	33.2	9.8	11.4	26.1	4.4	14.5	1.4	13.3	1.5

r Revised.

Source: U.S. Department of Labor, Bureau of Labor Statistics, Producer Price Indexes.

TABLE 84

COST TRENDS OF ELECTRIC LIGHT AND POWER CONSTRUCTION*

BY GEOGRAPHIC DIVISIONS — 1970 - 1991
1973 EQUALS 100

Date	North Atlantic	South Atlantic	North Central	South Central	Plateau	Pacific
Jan. 1, 1991	299	282	295	286	286	303
July 1, 1990	296	282	294	285	287	302
Jan. 1, 1990	290	279	288	282	282	297
July 1, 1989	286	275	284	278	277	293
Jan. 1, 1989	280	268	278	274	272	288
July 1, 1988	273	263	274	269	270	282
Jan. 1, 1988	260	253	261	257	258	271
July 1, 1987	251	244	253	250	249	262
Jan. 1, 1987	249	242	250	249	248	259
July 1, 1986	249	243	250	249	249	260
Jan. 1, 1986	246	241	247	249	247	260
July 1, 1985	244	240	245	247	247	258
Jan. 1, 1985	243	241	245	249	248	258
July 1, 1984	239	237	241	246	248	259
Jan. 1, 1984	233	233	236	243	244	255
July 1, 1983	231	233	236	242	245	254
Jan. 1, 1983	226	230	231	239	240	250
July 1, 1982	222	227	229	234	236	247
Jan. 1, 1982	218	222	226	231	232	240
July 1, 1981	209	218	215	222	222	230
Jan. 1, 1981	203	210	208	214	216	225
July 1, 1980	193	197	196	203	202	209
Jan. 1, 1980	186	191	190	195	197	200
July 1, 1979	178	182	181	187	188	192
Jan. 1, 1979	168	174	173	178	179	181
July 1, 1978	161	165	165	169	170	173
Jan. 1, 1978	156	161	159	164	166	168
July 1, 1977	154	158	157	162	163	165
Jan. 1, 1977	147	152	149	155	155	157
July 1, 1976	145	148	146	151	152	151
Jan. 1, 1976	140	144	141	146	145	146
July 1, 1975	138	140	140	142	143	141
Jan. 1, 1975	130	133	132	134	133	132
July 1, 1974	119	120	120	122	120	120
Jan. 1, 1974	105	105	104	105	105	105
July 1, 1973	100	100	100	100	100	100
Jan. 1, 1973	95	96	96	95	96	96
July 1, 1972	93	94	94	93	94	94
Jan. 1, 1972	92	91	94	91	92	93
July 1, 1971	87	88	90	88	89	89
Jan. 1, 1971	83	84	86	85	85	85
July 1, 1970	80	81	83	83	82	82
Jan. 1, 1970	77	79	80	80	80	80

** Index numbers shown are a composite of over 50 material and labor items included in the Handy-Whitman Index service of cost indexes of construction and equipment, all steam.*

Source: Handy-Whitman Index of Public Utility Construction Costs. Published by courtesy of Whitman, Requardt and Associates, Baltimore, Maryland.

TABLE 85

COST OF INDUSTRIAL PURCHASED ELECTRIC POWER AS A PERCENT OF VALUE OF PRODUCT SHIPMENT

U.S. AVERAGE 1983 - 1988

Standard Industrial Classification	Industry	1988	1987	1986	1985	1984	1983
20	Food and Kindred Products	0.8	0.8	0.9	0.9	0.9	0.9
21	Tobacco Manufactures	0.4	0.4	0.4	0.4	0.4	0.4
22	Textile Mill Products	2.2	2.2	2.3	2.3	2.3	2.2
23	Apparel and Other Textile Products	0.6	0.6	0.7	0.7	0.7	0.7
24	Lumber and Wood Products	1.5	1.4	1.5	1.5	1.5	1.4
25	Furniture and Fixtures	1.0	0.9	0.9	0.9	0.9	0.9
26	Paper and Allied Products	3.3	3.6	3.9	4.1	3.9	4.1
27	Printing and Publishing	0.7	0.7	0.7	0.7	0.8	0.7
28	Chemicals and Allied Products	2.2	2.4	2.9	3.1	3.1	3.0
29	Petroleum and Coal Products	1.3	1.4	1.6	1.1	1.1	1.0
30	Rubber and Miscellaneous Plastics Products	1.9	2.0	2.1	2.1	2.0	2.1
31	Leather and Leather Products	0.7	0.7	0.8	0.8	0.8	0.8
32	Stone, Clay and Glass Products	2.5	2.6	2.8	2.9	2.9	2.9
33	Primary Metal Industries	3.7	4.1	4.5	4.7	4.8	4.6
34	Fabricated Metal Products	1.1	1.2	1.2	1.2	1.3	1.2
35	Machinery, Except Electrical	0.8	0.8	0.9	0.9	0.9	0.9
36	Electric and Electronic Equipment	0.9	1.0	1.0	1.0	1.0	1.0
37	Transportation Equipment	0.6	0.6	0.6	0.6	0.6	0.7
38	Instruments and Related Products	0.7	0.7	0.8	0.8	0.8	0.8
39	Miscellaneous Manufacturing Industries	0.8	0.8	0.8	0.8	0.9	0.9
	Total Manufacturing	1.4	1.4	1.5	1.5	1.5	1.5

Note: 1989 and 1990 data not available at time of printing.

Source: U.S. Department of Commerce. Bureau of the Census. Annual Survey of Manufactures. Statistics for Industry Groups and Industries.

TABLE 86

CIRCUIT MILES OF OVERHEAD ELECTRIC LINE OF 22,000 VOLTS AND ABOVE IN SERVICE — TOTAL ELECTRIC UTILITY INDUSTRY

BY STATE AND VOLTAGE GROUPS

State/Division	Circuit Miles 1990p	1989r	1988r
Total United States*	**631,893**	**628,159**	**623,497**
Maine	4,024	4,019	3,809
New Hampshire	2,416	2,372	2,319
Vermont	1,787	1,784	1,783
Massachusetts	6,074	6,062	6,051
Rhode Island	698	704	713
Connecticut	1,804	1,804	1,804
New England	**16,802**	**16,745**	**16,478**
New York	20,461	20,404	20,417
New Jersey	6,491	6,350	6,320
Pennsylvania	21,748	21,107	20,707
Middle Atlantic	**48,701**	**47,861**	**47,443**
Ohio	20,950	21,788	21,543
Indiana	15,135	15,074	15,060
Illinois	16,638	16,573	16,642
Michigan	18,513	18,157	18,080
Wisconsin	9,771	9,659	9,654
East North Central	**81,008**	**81,250**	**80,978**
Minnesota	10,070	10,062	10,082
Iowa	10,772	10,771	10,812
Missouri	12,227	12,351	12,231
North Dakota	7,051	7,050	7,060
South Dakota	6,895	6,892	6,880
Nebraska	13,529	13,620	13,674
Kansas	10,215	10,210	10,169
West North Central	**70,758**	**70,955**	**70,909**
Delaware	2,633	2,664	2,636
Maryland	8,604	8,531	8,655
District of Columbia	10	10	10
Virginia	13,025	12,903	12,798
West Virginia	8,542	8,389	8,320
North Carolina	24,421	24,362	24,141
South Carolina	20,720	20,532	20,351
Georgia	23,203	23,014	22,820
Florida	17,670	17,577	17,499
South Atlantic	118,829	117,982	117,231
Kentucky	12,097	11,997	11,954
Tennessee	28,540	28,771	28,726
Alabama	14,210	14,269	14,227
Mississippi	13,745	13,825	13,659
East South Central	**68,592**	**68,862**	**68,566**
Arkansas	7,380	7,375	7,376
Louisiana	12,829	11,937	11,842
Oklahoma	10,245	10,242	10,187
Texas	49,015	48,794	48,308
West South Central	**79,470**	**78,348**	**77,712**
Montana	10,909	10,841	10,803
Idaho	11,965	11,967	11,788
Wyoming	5,312	5,164	5,066
Colorado	7,470	7,276	7,213
New Mexico	7,693	7,471	7,349
Arizona	13,498	13,322	13,000
Utah	6,925	6,718	6,697
Nevada	8,552	8,252	8,208
Mountain	**72,324**	**71,011**	**70,122**
Washington	19,183	19,038	18,859
Oregon	11,318	11,319	11,679
California	42,761	42,642	41,367
Pacific	**73,261**	**72,998**	**71,905**
Alaska	674	674	674
Hawaii	1,476	1,473	1,478
Alaska & Hawaii	**2,149**	**2,146**	**2,151**

Nominal Voltage	Circuit Miles 1990p	1989r	1988r
Total	**631,893**	**628,159**	**623,497**
22,000- 30,000	93,894	91,985	90,514
31,000- 40,000	69,554	69,308	68,990
41,000- 50,000	36,012	36,380	37,086
51,000- 70,000	107,495	107,490	107,410
71,000-131,000	94,661	94,321	93,072
132,000-143,000	66,720	66,625	66,076
144,000-188,000	24,614	24,403	23,902
189,000-253,000	65,323	64,710	64,296
254,000-400,000	45,994	45,312	45,047
401,000-600,000	24,029	24,027	23,504
601,000-800,000	3,599	3,599	3,599

Note: Total may not equal sum of components due to independent rounding.

**Does not include miles of line operated by REA Cooperatives.*

p Preliminary. r Revised.

TABLE 87

CIRCUIT MILES OF OVERHEAD ELECTRIC LINE OF 22,000 VOLTS AND ABOVE IN SERVICE — INVESTOR-OWNED ELECTRIC UTILITIES

BY STATE AND VOLTAGE GROUPS

State/Division	Circuit Miles 1990p	1989r	1988r
Total United States	**497,232**	**493,511**	**490,235**
Maine	3,999	3,994	3,784
New Hampshire	2,416	2,372	2,319
Vermont	1,682	1,679	1,678
Massachusetts	5,942	5,930	5,919
Rhode Island	698	704	713
Connecticut	1,769	1,769	1,769
New England	**16,505**	**16,448**	**16,182**
New York	19,029	18,971	18,984
New Jersey	6,482	6,340	6,311
Pennsylvania	21,748	21,107	20,707
Middle Atlantic	**47,258**	**46,418**	**46,001**
Ohio	20,866	21,704	21,458
Indiana	14,987	14,926	14,912
Illinois	16,410	16,346	16,418
Michigan	18,319	17,961	17,897
Wisconsin	9,668	9,555	9,574
East North Central	**80,250**	**80,493**	**80,259**
Minnesota	9,691	9,685	9,714
Iowa	10,189	10,199	10,244
Missouri	10,864	11,023	10,969
North Dakota	5,006	5,006	5,006
South Dakota	3,503	3,500	3,498
Nebraska	95	95	95
Kansas	10,044	10,039	10,001
West North Central	**49,392**	**49,547**	**49,527**
Delaware	2,527	2,558	2,539
Maryland	8,601	8,528	8,652
District of Columbia	10	10	10
Virginia	12,004	11,882	11,743
West Virginia	8,542	8,389	8,320
North Carolina	23,383	23,323	23,123
South Carolina	17,103	16,915	16,773
Georgia	17,944	17,767	17,567
Florida	12,670	12,576	12,535
South Atlantic	102,784	101,948	101,264
Kentucky	8,127	8,026	7,972
Tennessee	250	250	248
Alabama	10,180	10,119	10,089
Mississippi	9,836	9,859	9,720
East South Central	**28,393**	**28,254**	**28,028**
Arkansas	6,766	6,761	6,761
Louisiana	12,629	11,736	11,641
Oklahoma	8,380	8,377	8,321
Texas	44,564	44,332	43,802
West South Central	**72,338**	**71,206**	**70,526**
Montana	8,061	7,993	7,979
Idaho	11,062	11,064	10,957
Wyoming	3,236	3,171	3,128
Colorado	4,714	4,656	4,596
New Mexico	7,408	7,187	7,065
Arizona	6,436	6,262	5,959
Utah	6,306	6,117	6,096
Nevada	7,296	6,990	6,970
Mountain	**54,519**	**53,439**	**52,750**
Washington	4,078	4,080	4,176
Oregon	5,791	5,792	6,143
California	34,386	34,354	33,840
Pacific	**44,255**	**44,225**	**44,160**
Alaska	60	60	60
Hawaii	1,476	1,473	1,478
Alaska & Hawaii	**1,536**	**1,533**	**1,538**

Nominal Voltage	Circuit Miles 1990p	1989r	1988r
Total	**497,232**	**493,511**	**490,235**
22,000- 30,000	61,987	60,116	58,746
31,000- 40,000	61,636	61,436	61,322
41,000- 50,000	31,860	32,000	32,617
51,000- 70,000	87,189	86,928	87,026
71,000-131,000	76,143	75,764	74,829
132,000-143,000	62,495	62,410	61,916
144,000-188,000	10,522	10,483	10,159
189,000-253,000	48,673	48,245	48,180
254,000-400,000	38,582	37,985	37,674
401,000-600,000	15,740	15,738	15,359
601,000-800,000	2,406	2,406	2,406

Note: Total may not equal sum of components due to independent rounding.
p Preliminary. r Revised.

TABLE 88

NUMBER OF ELECTRIC DEPARTMENT EMPLOYEES

INVESTOR-OWNED ELECTRIC UTILITIES

Year	Average	At December 31	Year	Average	At December 31
1990p	**511,653**	**510,595**	1985	524,503	532,820
1989	518,584	513,534	1984	516,100	526,678
1988	522,362	520,762	1983	513,200	517,400
1987	523,868	526,484	1982	505,100	513,323
1986	529,664	533,642	1981	490,500	489,001

p Preliminary.

GLOSSARY

Allowance for Funds Used During Construction (AFUDC): An amount recorded by a company to represent the cost of those funds used to finance Construction Work in Progress (CWIP). See Glossary of Electric Utility Terms.

Capability: The maximum load which a generating unit, generating station, or other electrical apparatus can carry under specified conditions for a given period of time, without exceeding approved limits of temperature and stress.

Capacity: The load for which a generating unit, generating station, or other electrical apparatus is rated either by the user or by the manufacturer. See also Nameplate Rating.

Capital Expenditures (Capital Outlay): Cost of construction of new utility plant (additions, betterments, and replacements) and expenditures for the purchase or acquisition of existing utility plant facilities.

Capitalization: The total of: Long-Term Debt, Preferred Stock and Common Stock Equity. For balance sheet presentation, several modifications are sometimes made: current maturities of Long-Term Debt are not included in the Capitalization section, but Short-Term Debt (with an original maturity of less than one year) which will be refinanced by Long-Term Debt is sometimes included.

Class of Service: A group of customers with similar characteristics (i.e., residential, commercial, industrial, sales for resale, etc.) which is identified for the purpose of setting a rate for electric service.

Construction Expenditures (Gross): Expenditures (may or may not include interest and/or other overheads charged to construction)for construction including additions to and betterments, renewals, and replacements of utility plant during a specific period, but not money spent for maintenance, the cost of removal, nor the acquisition of existing utility systems or segments.

Consumer Price Index (CPI): Average change in prices over time in a fixed market basket of goods and services. The Bureau of Labor Statistics publishes CPIs for two population groups: (1) A CPI for all Urban Consumers (CPI-U) which covers approximately 80 percent of the total population and (2) A CPI for Urban Wage Earners and Clerical Workers (CPI-W) which covers 32 percent of the total population.

Customers, Average: The arithmetic averages of month-end customers in each of 12 consecutive months. For those billed other than every month, the number of such customers is adjusted to a 12-month basis (e.g., for bimonthly billing the number of customers billed, or counted, in each month is multiplied by two and the resultant averaged for the 12-month period).

Demand: The rate at which electric energy is delivered to or by a system, part of a system, or a piece of equipment. It is expressed in kilowatts, kilovoltamperes or other suitable unit at a given instant or averaged over any designated period of time. The primary source of "Demand" is the power-consuming equipment of the customers.

Electric Generation — Net: Gross generation less kilowatthours used at the generating station(s).

Electric Utility Industry: All enterprises engaged in the production and/or distribution of electricity for use by the public, including:

Investor-Owned Electric Utilities organized as tax-paying business usually financed by the sale of securities, in the free market.

Cooperatively-Owned Utilities A group of persons who have organized a joint venture for the purpose of supplying electric energy to a specified area.

Government-Owned includes municipal systems, federal agencies, state projects, and public power districts; and, where the data are not separable, those industrial plants contributing to the public supply.

Expenses, Operating: A group of expenses applicable to utility operations composed of: Operation Expense, Maintenance Expense, Provisions for Depreciation and Amortization, Taxes Other Than Income Taxes, Income Taxes, Provision for Deferred Income Taxes, Income Taxes Deferred in Prior Years-Credit, and Investment Tax Credit Adjustments-Net.

Fuels, Fossil: Any naturally occurring fuel of an organic nature, such as coal, crude oil, and natural gas.

Industrial Electric Power: Electric generating stations operated by Industrial establishments.

Load Factor: The ratio of the average load in kilowatts supplied during a designated period to the peak or maximum load in kilowatts occurring in that period. Load factor, in percent, also may be derived by multiplying the kilowatthours in the period by 100 and dividing by the product of the maximum demand in kilowatts and the number of hours in the period.

Margin, Percent Capacity: The difference between capability and peak load divided by the capability times 100. Should not be confused with Percent Reserve Margin in which the difference is divided by the peak load.

Nameplate Rating: The full-load continuous rating of a generator, prime mover or other electrical equipment under specified conditions as designated by the manufacturers.

Output, Weekly Electric: The sum of the system output of all investor-owned utilities, rural electric cooperatives, and government power projects in the contiguous United States adjusted for all inter-utility deliveries.

Peak Load: See Demand — The greatest demand which occurs during a specified period of time.

Prime Mover: The engine, turbine, water wheel, or similar machine which drives an electric generator.

Producer Price Index: Formerly known as the Wholesale Price Index, this index is the oldest continuous statistical series published by BLS. It is designed to measure average changes in prices of all commodities, at all stages of processing, produced or imported for sale in primary markets in the U.S.

Revenue, Average: Revenue from the sale of electricity (exclusive of forfeited discounts and penalties) for a particular class of service divided by the corresponding number of kilowatthours sold.

Utility Plant, Electric: All equipment used for the generation, transmission, and distribution of electricity, or an account in which record is kept of this equipment. Includes Plant in Service, Purchased or Sold, in Process of Reclassification, Leased to Others, Held for Future Use, Under Construction, and Acquisition Adjustments and Adjustment Accounts, without deduction of Accumulated Provision for Depreciation and Amortization.

MAJOR GEOGRAPHIC DIVISIONS AS REPORTED BY THE EDISON ELECTRIC INSTITUTE IN ITS WEEKLY RELEASE OF ELECTRIC OUTPUT

Percentages represent net electric energy generated, plus energy received from others, less energy delivered for resale in each region for the 52 weeks ended December 29, 1990.

BUREAU OF CENSUS GEOGRAPHIC DIVISIONS AS REPORTED IN THE EDISON ELECTRIC INSTITUTE *STATISTICAL YEARBOOK*

PUBLICATIONS PREPARED BY THE STATISTICS DEPARTMENT

Pub. No.	Title	Unit Price
01-91-12	Capacity and Generation of Non-Utility Sources of Energy	$150.00
01-91-11	Catalogue of Investor-Owned Electric Utility Companies Operating in the United States	10.00
04-88-10	Digest of Electric Utility Financial Ratios	10.00
01-91-08	Disk Version of EEI Statistical Yearbook – 5¼"	45.00
01-91-08-A	Disk Version of EEI Statistical Yearbook – 3½"	45.00
01-91-10	EEI Pocketbook of Electric Utility Industry Statistics	3.00*
01-91-09	Electric Power Equipment Report	20.00
01-91-05	Glossary of Electric Utility Terms	12.50
04-84-14	Guidelines for Defining and Classifying Electric Customers By Major Energy Use	1.25
01-91-02	Post-Summer Electric Power Survey	10.00
04-81-03	Problems and Limitations of Intercompany Comparisons of Inv.-Owned Electric Utilities	5.00
04-33-01	Statistical Releases	65.00**
01-91-03	Statistical Yearbook of the Electric Utility Industry	40.00
01-91-06	Statistics, Non-Investor-Owned Electric Utilities	20.00
01-91-07	Statistics on Fuel Used to Generate Electricity by the Electric Utility Industry	15.00

* Minimum order — 10 copies

** Effective October 1, 1990

ORDER FORM

EDISON ELECTRIC INSTITUTE

701 Pennsylvania Avenue, N.W.
Washington D.C. 20004-2696
Attn: Order & Billing

Item #	Qty.	Product Description	Unit Price	Total Amount

To Order Call
1-202-508-5424
1-202-508-5425

Or FAX your order
1-202-508-5030

Shipping & Handling	
Subtotal	Charges
up to $ 9.99	$4.00
$10.00 to $29.99	$5.00
$30.00 to $70.00	$6.00
over $70.00	9% of subtotal

Amount Ordered	
SUBTOTAL	
Residents of Washington, DC add 6% sales tax	
Shipping & Handling Charges	
PAY THIS AMOUNT	

Company Name

Individual Name Title

Shipping Address (Use Street Address)

City State Zip ( ) Phone with area code

☐ Check Enclosed
(made payable to: Edison Electric Institute-U.S. funds only)

☐ To Be Invoiced, please attach purchase order

085

EDISON ELECTRIC INSTITUTE

701 Pennsylvania Avenue, N.W.
Washington D.C. 20004-2696
Attn: Order & Billing

Item #	Qty.	Product Description	Unit Price	Total Amount

To Order Call
1-202-508-5424
1-202-508-5425

Or FAX your order
1-202-508-5030

Shipping & Handling	
Subtotal	Charges
up to $ 9.99	$4.00
$10.00 to $29.99	$5.00
$30.00 to $70.00	$6.00
over $70.00	9% of subtotal

Amount Ordered	
SUBTOTAL	
Residents of Washington, DC add 6% sales tax	
Shipping & Handling Charges	
PAY THIS AMOUNT	

Company Name

Individual Name Title

Shipping Address (Use Street Address)

City State Zip ( ) Phone with area code

☐ Check Enclosed
(made payable to: Edison Electric Institute-U.S. funds only)

☐ To Be Invoiced, please attach purchase order

085